MI Access™
Michigan's Alternate Assessment Program

TECHNICAL REPORT

MI-Access Participation and Supported Independence v1.5 Mathematics and English Language Arts

Michigan's Alternate Assessment Program

Michigan Department of Education

Office of Educational Assessment and Accountability

MICHIGAN Department of Education

EXECUTIVE SUMMARY

The demographic profile of the United States is becoming increasingly diverse and as a result K-12 schools are now serving students who are progressively more varied in cultural background, socioeconomic status, and disability status. Nearly 6 million children with disabilities between the ages of 6 and 21 receive special education services in the United States. About 12% of all students enrolled in K-12 schools are students with disabilities (Thurlow, Thompson, and Lazarus, 2006).

Federal legislation has had a profound impact on the assessment of students with disabilities by requiring that state assessments used for school accountability include students who previously have been underserved both instructionally and in the assessment of their achievement. These students include English language learners (ELLs) and students with disabilities.

MI-Access was created out of the need to provide equitable educational opportunities to students with disabilities and to comply with the federal legislative initiatives. For over 30 years, the only statewide assessment available to students in Michigan was the Michigan Educational Assessment Program (MEAP), which even with assessment accommodations is not appropriate for some special education students. As a result, the Michigan Department of Education (MDE) began developing an alternate assessment program, which is now called MI-Access. MI-Access is one component of the Michigan Educational Assessment System (MEAS), which was adopted by the State Board of Education in November 2001. MI-Access is administered to three distinct populations of special education students: Participation, Supported Independence, and Functional Independence students. Assessments have been developed for each of the three populations in the content areas of English language arts, mathematics, and science.

This Technical Report provides complete and thorough documentation of the development process of one component of the MI-Access assessment program: Participation and Supported Independence v1.5 English language arts and mathematics in Grades 3-8 and 11. These assessments were field tested in Fall 2006 and administered for the first time statewide in Spring 2007. Documentation of the assessment development procedures can be viewed as the foundation necessary for valid interpretation and use of test scores.

The *MI-Access Participation and Supported Independence v1.5 Technical Report* adheres to the highest test development principles, *the Standards for Educational and Psychological Testing* (1999) and as such provides precise documentation of all relevant evidence necessary to prove validity and support and defend a test, including careful test construction, adequate score reliability, appropriate test administration and scoring, accurate scaling, equating, and standard setting, and careful attention to examinee fairness issues.

The *MI-Access Participation and Supported Independence v1.5 Technical Report* addresses and documents all key components that are necessary for technical documentation as outlined in the *Standards* (1999). The overview and purpose of the assessment are detailed in Chapter 1, including the philosophical and historical basis for the assessment, the nature of the assessment and the population served, and the appropriate and inappropriate uses of test score interpretations. Chapter 2 addresses the entire assessment development process from content selection and specification, item specifications, test blueprint, item development, committee review procedures, item selection, form design, to a description of

the operational forms including events such as the Pilot. The test administration, scoring, reporting, test score interpretation, and references to numerous other supplemental materials are discussed in Chapter 3. The actual technical characteristics of the assessment: item and test-level statistics, scaling and equating data, standard setting rationale and processes for setting performance standards, and reliability/measurement error are completely documented and addressed in Chapters 4-6. Lastly, in Chapter 7 the validation procedures are discussed; each fundamental decision in the test construction process is discussed, documented, and reported as it contributes to the validity evidence for the test scores resulting from assessment.

The *MI-Access Participation and Supported Independence v1.5 Technical Report* thoroughly documents the overall reliability, validity, and quality of the MI-Access Participation and Supported Independence v1.5 assessment and has provided indisputable evidence of meeting the highest standards of assessment and measurement and has been deemed an outstanding assessment program for students with disabilities.

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The concept behind the Technical Reports for MI-Access, including Participation & Supported Independence v1.5 and Functional Independence, is to provide a way to communicate with test users. This is the primary purpose of supporting documents of tests as described by the *Standards for Educational and Psychological Testing* (1999). As suggested by the *Standards*, the reports should describe (a) the nature of the tests; (b) their intended uses; (c) the processes involved in their development; (d) technical information related to scoring, interpretation, and evidence of validity and reliability; (e) scaling and equating; and (f) guidelines for test administration and interpretation (p. 67).

The Technical Reports for MI-Access are designed to communicate with multiple users, including state policy makers and their staffs, school and district administrators, teachers, and parents and other advocates interested in such documentation. The MI-Access reports are not designed to be inclusive of the volumes of documentation available for MI-Access. At some point, excessive documentation renders such reports inaccessible. To the extent possible, additional existing documentation will be referenced within the reports and made available upon request.

The *MI-Access Participation and Supported Independence v1.5 Technical Report* contains a summary of the quantitative and qualitative evidence gathered to support the purposes and uses of the MI-Access Participation and Supported Independence v1.5 Assessment. The primary purposes of MI-Access assessments are described in the report. The intent of this Technical Report is to provide relevant technical evidence for the Participation and Supported Independence v1.5 assessment specifically.

The Technical Report uses the *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999) as a guiding framework. The *Standards* provide guidelines regarding the relevant technical information that test developers need to make available to test users. The *Standards* provide clear criteria for test designers, publishers, and users, as well as guidelines for the evaluation of tests. Specific references to the *Standards* are made at applicable points throughout the report.

The *MI-Access Participation and Supported Independence v1.5 Technical Report* is organized around the *Standards* that relate to test development, reliability, validity, and test administration, with additional attention paid to standards regarding testing individuals with disabilities. It also relies on the recommendations provided in the *Standards* that address essential supporting documentation for tests. Among the recommended supporting documentation, the report addresses "the nature of the test; its intended use; the processes involved in the test's development; technical information related to scoring, interpretation, and evidence of validity and reliability; … and guidelines for test administration and interpretation" (p. 67).

The report responds to the first standard on supporting documentation for tests (Standard 6.1), which reads:

> Test documents (e.g., test manuals, Technical Reports, user's guides, and supplemental material) should be made available to prospective test users and other qualified persons at the time a test is published or released for use (p. 68).

Throughout the report, where applicable and appropriate, the corresponding standards to which the documented evidence applies are referenced in footnotes.

CHAPTER 1

MI-ACCESS: MICHIGAN'S ALTERNATE ASSESSMENT PROGRAM

1.1 The Origins of MI-Access

MI-Access, Michigan's Alternate Assessment Program, is the state's response to federal and state educational mandates and policies related to inclusion, assessment, and accountability. Relevant mandates and policies are described below.

Federal Requirements

Federal mandates requiring the inclusion of students with disabilities in assessment programs were strengthened and clarified in the *Elementary and Secondary Education Act of 1994 (Title 1)* and the *Individuals with Disabilities Education Act of 1997 (IDEA)*. The IDEA contains the most specific requirements. It stipulates that:

- All children with disabilities should have available to them educational programs and services that will prepare them for employment and independent living.
- Children with disabilities should be included in general state and district-wide assessment programs, with appropriate accommodations where necessary.
- State or local educational agencies must develop guidelines for the participation of children with disabilities in alternate assessments for those children who cannot participate in the general assessment program (required to be in place by July 1, 2000).

Furthermore, the *No Child Left Behind Act of 2001 (NCLB)* introduced an additional set of mandates requiring the inclusion of every child in state assessment programs with specific grade- and subject-matter requirements.

State Requirements

In 1995, the Michigan State Board of Education (SBE) adopted the Model Content Standards contained in the *Michigan Curriculum Framework* as performance indicators for assessing progress toward achieving goals and standards for Michigan students. In November 1998, the SBE also approved the use of *Addressing Unique Educational Needs of Students with Disabilities* (AUEN 3.0) performance standards in developing a model for instruction and alternate assessment. The AUEN is not seen as a separate set of standards, but a model of how to operationalize the Model Content Standards for students with disabilities at various levels of cognitive functioning.

In addition, in October 2001, the SBE adopted a policy to include all students in the MEAS. The MEAS includes the MEAP, the state's general assessment program; MI-Access, the state's alternate assessment program; and the English Language Proficiency Assessment (ELPA), which is for English language learners. MI-Access is the one component of the MEAS designed specifically to assess students with disabilities whose Individualized Education Program (IEP) Teams have determined that the MEAP is inappropriate for them, even with assessment accommodations. The SBE's policy reads as follows:

> It shall be the policy of the State Board of Education that each local and intermediate school district and public school academy will ensure the participation of all students in the Michigan Educational Assessment System [the MEAP, MEAP with assessment accommodations, MI-Access, or ELL-Access].

MI-Access as a Response to Federal and State Mandates

To respond to federal and state policies and mandates, the Michigan Department of Education (MDE), first through the Office of Special Education and Early Intervention Services (OSE/EIS) and now through the newly established Office of Educational Assessment and Accountability (OEAA), undertook the responsibility of developing an alternate assessment program so that students with disabilities could participate meaningfully in the state's assessment system.

Due to the enormity of the task, the MDE decided to develop and implement MI-Access—its alternate assessment program—in four phases.

First Phase of Development: Participation and Supported Independence

The first generation of MI-Access Participation and Supported Independence assessments were developed in phase one. MI-Access Participation assessments are designed specifically for students who have, or function as if they have, severe cognitive impairment. These students are expected to require ongoing support in adulthood. They may also have both considerable cognitive and physical impairments that limit their ability to generalize or transfer learning, and thus may make determining their actual abilities and skills difficult. For that reason, the first generation of the MI-Access Participation assessments focused only on how a student responded to the opportunity to participate in an activity, not on how well he or she carried out that activity.

The MI-Access Supported Independence assessments are designed for students who have, or function as if they have, moderate cognitive impairment. These students are expected to require ongoing support in adulthood. They may also have both cognitive and physical impairments that impact their ability to generalize or transfer learning; however, they usually can follow learned routines and demonstrate independent living skills. The Supported Independence assessments, therefore, are designed to provide students with opportunities to demonstrate their skills. Specifically, they measure how students perform certain tasks while acknowledging that they may require some allowable level of assistance to do so. (See Figure 1 for more information on the characteristics of students who would likely participate in MI-Access Participation and Supported Independence assessments.)

In the first two years of implementation, MI-Access Participation and Supported Independence assessments were administered once each year to students who were 9, 10, 13, 14, 17, and 18 years old. These ages were selected because (1) many students taking part in these assessments were not assigned a grade level, and (2) they ensured that students assessed with MI-Access were assessed with the same frequency as general education students (that is, the ages corresponded with the grades assessed by the MEAP).

In 2003/2004, however, MI-Access Participation and Supported Independence were converted from ages to grades in order to comply with NCLB requirements of assessing student once in elementary school, middle school and high school. With that conversion, students in grades 4, 7, 8, and 11 were assessed since these were the grades in which English language arts and/or mathematics were assessed by the MEAP.

In 2005/2006, grades 3, 5, and 6 were added as required by federal law. The first generation of the MI-Access Participation and Supported Independence assessments did not meet all of the NCLB criteria for alternate assessments based on alternate achievement standards. As result, new Participation and Supported Independence v1.5 assessments in

the content areas of English language arts and mathematics are in the third phase of development: MI-Access Participation and Supported Independence v1.5.

Second Phase of Development: MI-Access Functional Independence

The MI-Access Functional Independence assessments are designed for students whose IEP Teams have determined it is not appropriate for them to take part in the MEAP, the MEAP with assessment accommodations, MI-Access Participation v1.5, or MI-Access Supported Independence v1.5. This primarily involves students who have, or function as if they have, mild cognitive impairment. They also have a limited ability to generalize learning across contexts, their learning rates are significantly slower than those of their age-level peers, they have a restricted knowledge base, they tend not to be very aware of environmental cues or details, and they do not learn incidentally. In adulthood, these students will most likely be able to meet their own needs and live successfully in their communities without overt support from others. It was determined that these students could benefit from an assessment containing a mix of English language arts and mathematics items presented in the contexts of daily living, employment, and community experience. (See Figure 2 for more information on the characteristics of students who would likely participate in the MI-Access Functional Independence assessments.)

The MI-Access Functional Independence assessments were implemented for the first time statewide in 2005/2006. They were administered in the fall to students in grades 3 through 8 and in the spring to students in grade 11. As required by federal law, the assessments include the content areas of English language arts and mathematics.

Third Phase of Development: New Participation and Supported Independence v1.5 Assessments in the Content Areas of English Language Arts and Mathematics

The third phase of completing MI-Access, Michigan's Alternate Assessment Program is to retire the first generation of MI-Access Participation and Supported Independence v1.5 assessments and develop new ones, which meet all of the NCLB criteria for alternate assessments based on alternate achievement standards. These assessments are referred to as the MI-Access Participation and Supported Independence v1.5 assessments in the content areas of English language arts and mathematics.

Fourth Phase of Development: Development of MI-Access Science Assessments

The fourth phase of completing the MI-Access assessments is the development of science assessments for all three levels of MI-Access. These assessments are required by NCLB to be implemented no later than the 2007/2008 school year. The development of these assessments began during the 2005/2006 school year and were piloted in Spring 2007.. The science assessments will be administered statewide for the first time in Fall 2007.

This report provides information *only* on phase 3 MI-Access (Participation and Supported Independence v1.5).

Involvement of Michigan Stakeholders

To support the development of MI-Access, the MDE convened numerous committees of Michigan stakeholders.

- The Phase 2 Assessment Plan Writing Team (APWT) was comprised of general and special education practitioners familiar with students at the Functional Independence level. The team was charged with the development of the Assessment Plan (described below). In addition, the team reviewed the Grade Level Content Expectations (GLCE) and benchmarks and 'extended' them as necessary for the target population.

- The Content Advisory Committee (CAC) was comprised of members of the APWT and additional practitioners familiar with students at the Participation and Supported Independence level. It was charged with determining which content standards were assessable at the state level and extending the benchmarks as needed. It reviewed all developed assessment items and materials prior to administration. The CAC provided important validity evidence in their reviews, certifying that items (a) accurately reflect intended content standards and GLCE/benchmarks, (b) meet specifications for conceptual accuracy and completeness, and (c) are grade appropriate.

- The Sensitivity Review Committee (SRC) was responsible for reviewing all assessment items and materials for inappropriate language or differential performance based on race/ethnicity and gender. In addition, it looked for topics that, because of their sensitive nature, may not be appropriate for statewide assessment. To ensure independent review, SRC members did not participate on any other committees related to MI-Access.

- A national Technical Advisory Committee (TAC) provided the MDE with psychometric and technical advice related to the development, implementation, reporting, and evaluation of all phases of MI-Access. Its members were drawn from a pool of national assessment experts. The TAC met several times during the development and initial implementation of MI-Access and continues to meet to provide advice regarding issues related to reporting, the state's accountability system, Adequate Yearly Progress, and other federal requirements.

Members of the APWT, SRC, and CAC are listed in the alternate assessment development plan.[1] It should be noted that the MDE selected Questar Assessment, Inc. as the operational contractor for the MI-Access assessments. As contractor, Questar provides a wide range of assessment development and support services.

1.2 The Nature of the Assessment & Population

MI-Access is an alternate assessment system that employs a standardized set of instruments covering state content frameworks in English language arts and mathematics used to ultimately yield an overall classification of student performance into one of three levels: surpassed the performance standard, attained the performance standard, and emerging toward the performance standard.

[1] Standard 1.7. When a validation rests in part on the opinion or decisions of expert judges, observers, or raters, procedures for selecting such experts and for eliciting judgments or ratings should be fully described. The qualifications, and experience, of the judges should be presented.

IEP Teams, through a deliberative process, determine which assessment their students will take. More information regarding the assessment administration process—with a focus on the technical adequacy of the procedures—is provided in Chapter 3.[2]

Participation (P)

Students that are determined to function at the P Level have, or function as if they have, severe cognitive impairments. These students may have both considerable cognitive and physical impairments that limit their ability to generalize or transfer learning, and thus may make determining their actual abilities and skills difficult. These students are expected to require ongoing support in adulthood.

Supported Independence (SI)

Students that are determined to function at the SI Level have, or function as if they have, moderate cognitive impairment. These students may have both cognitive and physical impairments that impact their ability to generalize or transfer learning; however, they usually can follow learned routines and demonstrate independent living skills. These students are expected to require ongoing support in adulthood.

1.3 Intended Uses

Phase 3 MI-Access Participation and Supported Independence v1.5 was developed primarily to allow students with severe and moderate cognitive impairment—who would otherwise not be assessed with the state's general assessment—to participate in the MEAS.[3] Thus, MI-Access is moving the state toward its own goal of including all students in the state's educational accountability system and toward compliance with federal educational rules and requirements, including the calculation of Adequate Yearly Progress (AYP).

Scores from MI-Access assessments can be used in a variety of meaningful ways by students, programs, schools, districts, and the state. For example, MI-Access results can:

1. Inform parents about their child's level of performance by (a) providing periodic criterion-related performance information on curriculum-relevant and functional areas of achievement, (b) clarifying instructional and behavioral educational targets, and (c) improving parents' understanding of their child's learning objectives and achievement.

2. Inform teachers about their students' level of performance by (a) helping them focus instruction on targets related to important content strands in English language arts and mathematics, (b) supporting the creation of instructional activities related to developing skills in areas needing improvement, and (c) identifying areas of program-wide instructional strengths and weaknesses.

3. Inform IEP team decision making by helping with the (a) determination of IEP goals and educational targets, (b) assessing the attainment of IEP goals, and (c) writing present level of educational performance statements.

[2] Standard 3.6. The type of items, the response formats, scoring procedures, and test administration procedures should be selected based on the purposes of the test, the domain to be measured, and the intended test takers.
[3] Standard 1.1. A rationale should be presented for each recommended interpretation and use of test scores, together with a comprehensive summary of the evidence and theory bearing on the intended use or interpretation.

4. Inform district, school, and program accountability by (a) using student performance data for continuous improvement efforts, (b) including students previously exempted from assessments, (c) developing incentives for stronger monitoring of program development, and (d) enhancing the ability of students to participate in and benefit from school experiences.

The following potential uses are *not* appropriate because they are unsupported by available research evidence.[4]

1. Teacher quality or merit-based decisions -
   There is no evidence to suggest that the information obtained through MI-Access could be used to determine teacher quality or provide support for individual teacher merit-based decisions. This is particularly difficult for students at the Participation and Supported Independence levels as these students rely on special education services in a variety of ways and to different degrees. Uses for information derived from MI-Access should focus instead on curricular content and the opportunities provided to students by programs.

2. A single source for IEP development -
   MI-Access is based on critical aspects of participation in major life roles. Although the range of outcomes specified within the framework is broad, it is not absolute. There are likely to be important and meaningful aspects of individual goals that are related to, but not contained within, MI-Access but are relevant to IEP development. MI-Access results should not constrain an IEP Team's deliberations, but instead should guide, expand, and inform them.

1.4 Assessment Development Process

Early in the MI-Access planning stages, multiple phases were defined, including Phase 1 for the first generation of Participation and Supported Independence assessments; Phase 2 for Functional Independence; Phase 3 for the next generation of Participation and Supported Independence v1.5 assessments; and Phase 4 for the science assessments at all three levels. The Technical Report for the first generation of Participation and Supported Independence has been completed, as well as the Technical Report for Functional Independence Mathematics and English Language Arts. The Technical Report for science will be completed following the first statewide administration in Fall 2007. As stated above, Phase 3 MI-Access involves the development and implementation of the assessment for Levels 1 and 2, Participation (P) and Supported Independence (SI). This report focuses on the new P/SI v1.5 assessments.

Plan for the Development of the Alternate Assessment

During the initial development of MI-Access Participation and Supported Independence, a *Proposed Phase Participation and Supported Independence 1.5 MI-Access Assessment Plan* was developed by a group of 40 educators and parents experienced in working with learners with special needs during the 2005/2006 school year. This Participation/Supported Independence v1.5 Assessment Plan Writing Team was comprised of a well-balanced team of individuals representing a broad spectrum of backgrounds and experience, including general and special education teachers, parents, teacher consultants, administrators, school psychologists, and so forth. The group also was intentionally geographically and

[4] Standard 4.3. If there is sound reason to believe that specific misinterpretations of a score scale are likely, test users should be explicitly forewarned.

demographically diverse. The list of team members is in the Appendix of the Assessment Plan. The plan includes

> (1) the assumptions underlying the assessment; (2) the population and subject areas assessed; (3) the number of assessment items and their formats; (4) prototype items to guide item writers; and (5) other information clarifying how and why the assessment should be developed. (MDE, 2006, p.12)

The P/SI v1.5 APWT met three times during 2005 to draft the Extended Grade Level Content Expectations (EGLCE) for elementary and middle school and Extended High School Content Expectations (EHSCE) for high school. The original APWT expanded to 74 members following the USED Peer Review results related to the MI-Access Participation and Supported Independence assessments administered during the 2005/2006 school year. The support from Michigan educators to develop assessments that meet all of the NCLB criteria was phenomenal. The knowledge and expertise of Michigan educators and parents was integral to the successful development of the MI-Access Participation and Supported Independence v1.5 Assessment Plan and the assessments activities and scoring rubrics.

To develop the P/SI v1.5 assessments, Michigan educators and MI-Access staff used the activities from the original P/SI assessments, which were eligible to be used on the operational assessments from the 2001 through the 2005/2006 school year, and revised them to *explicitly* assess English language arts or mathematics. In addition, Michigan educators used the Draft EGLCEs and Extended EHSCEs that the original P/SI v1.5 APWT drafted during the 2005/2006 school year.

The original P/SI assessment activities are being used as the performance context for assessing English language arts or mathematics content because the MI-Access Team knows that P/SI students are routinely involved with these types of activities. In addition, the scoring rubrics developed by the Science APWT will replace the current P/SI scoring guides. Professional development related to these new scoring rubrics will be developed over the summer and will be available prior to being field tested.

The P/SI v1.5 assessment activities were field tested in fall 2006 throughout the state to obtain teacher feedback on issues such as whether or not the activities are easy to understand in relationship to (1) the academic content being assessed, (2) what should be observed, and (3) what the role of the Primary Assessment Administrator was and the Shadow Assessment Administrator, and (4) if the scoring rubrics were easy to learn and apply in order to score the student responses.

The basic timeline for the development of the MI-Access P/SI v1.5 Assessment included the following:

- April-August 2006: Development of the items/assessment by OEAA
- Fall 2006: Pilot administration (grades 3-8 and 11)
- December 2006: SRC/CAC Data Review (grades 3-8 and 11)
- Spring 2007: Statewide implementation (grades 3-8 and 11)
- May 2-3, 2007: Standard Setting (grades 3-8 and 11)

CHAPTER 2

ASSESSMENT DEVELOPMENT

2.1 The MI-Access Participation and Supported Independence v1.5 Design

To meet both the intent and function of state and federal legislation, rules, and policies, MI-Access was designed to parallel the existing MEAP assessment model (MEAP is Michigan's general state assessment program). The ideal alternate assessment program was envisioned as one that would parallel the existing general assessment program in as many ways as practical. Primary design considerations included the timing of the assessment window, the age groups/grades assessed, and the assessment administration burden on teachers and students.

The existing MEAP is (a) structured to assess students in specific grades and specific content areas with the content areas alternating across grades, and (b) administered in the fall of each school year with students in grades 3 through 8 and in the spring with students in grade 11. These two considerations were emulated in the design of MI-Access to ensure that students with disabilities participating in alternate assessment would have experiences similar to those of students participating in the MEAP.

Content Areas and Grades Assessed

The Assessment Plan Writing Team (APWT) reviewed several sources of information to identify and select content standards essential for the MI-Access P/SI v1.5 assessments. The Michigan Curriculum Framework was viewed as the foundation of local curricula in general education programs. NCLB requires direct links between state assessments and state curriculum. In addition, the Clarifying Language in Michigan's Benchmarks CD-ROM tool (MI-CLiMB) provided guidance regarding instruction and assessment strategies in a way that facilitated the development team to extend essential benchmarks to the P/SI populations.

In three separate groups, the APWT completed a process of unpacking content standards in the areas of English language arts, mathematics, and career and employability skills. The Michigan Curriculum Framework's model content standards, benchmarks, and grade level content expectations (GLCEs) were reviewed for appropriateness for the P/SI populations. In addition, benchmarks and GLCEs were modified or extended when possible with respect to the accessibility or enabling skills needed to achieve the content standard. The complete process was described in the *Proposed MI-Access Participation and Supported Independence v. 1.5 Assessment Plan* (MDE, 2007). From this process, the following questions were addressed:

- *What results/scores will be reported?*
- *Which of the unpacked content standards, extended benchmarks, and/or extended GLCEs can be assessed appropriately at the state level?*
- *How might the state assessable EGLCE and EHSCE be assessed? What strategies could be used?*
- *What task/item formats and response modes might be used? Create prototypes.*

- *What practical issues are related to the proposed content (e.g., the length of the assessment, the time of administration, the validity/reliability issues related to having one or two assessment administrators observing each assessment activity, and so forth)?*

The MEAP model includes a fall and spring assessment window. In the fall of each year, English language arts (reading and writing) and mathematics assessments are administered in grades 3 through 8, science is administered in grades 5 and 8, and social studies is administered in grades 6 and 9. Fall assessments began with the newly constituted NCLB grades 3-8 assessments to provide timely information to teachers for instructional planning.

All four content areas are assessed in the spring of each year through grade 11. These assessments were also designed to meet NCLB requirements as well as provide information for the Michigan Merit program, which provides scholarships to students based on their high school performance (social studies is not included in the Merit award program).

To parallel the MEAP, MI-Access Participation and Supported Independence v1.5 will administer English language arts and mathematics to grades 3 through 8 in the fall and grade 11 in the spring. The assessment window will be open for six weeks to allow for the amount of time it takes to administer the assessments to students individually. However, in the 2006/2007 school year, the MI-Access Participation and Supported Independence v1.5 assessments in English language arts and mathematics were assessed in the spring so that these tests and their results can be submitted for Peer Review by the U.S. Department of Education.

2.2 Assessment Format

For both ELA and mathematics, assessment items on the pilot and operational assessments consisted of structured, on-demand standardized activity-based assessment items. These items explicitly measured the content areas of ELA and mathematics and were administered in familiar, meaningful contexts. Students were observed by two assessment administrators, the Primary Assessment Administrator (PAA) and the Shadow Assessment Administrator (SAA), as they carried out a standard set of items during the course of school day. The PAA and SAA then simultaneously and independently scored the students according to a rubric. One rubric was developed for Participation v1.5 assessments and another for Supported Independence v1.5. The items were grounded in real-world contexts (daily living, employment, and community experience) and were administered during normal instructional routines. All items were designed to allow for a variety of response modes, such as speaking, signing, eye gaze, and nodding.

Accompanying each activity was a scoring focus, which was directly linked to a state-assessable EGLCE or EHSCE. The scoring focus helps the PAA and SAA score the student according to whether he or she has correctly responded to the *academic* component that the item is measuring. In August 2006, a P/SI v1.5 Online Learning Program was produced to train Michigan educators involved with the administration of the P/SI v1.5 ELA and Mathematics Assessments on how to correctly apply the Participation and Supported Independence v1.5 scoring rubrics.

English Language Arts

The ELA sub-group of the APWT recommended that the MI-Access P/SI v1.5 ELA assessments have two primary areas of focus: accessing information and expressing ideas.

These areas of focus are similar to the ones for MI-Access Functional Independence (accessing information and expressing ideas), which provided a consistent continuum for all three MI-Access ELA assessments. With regard to accessing information, students are assessed on their ability to gain meaning from print/pictures and by listening including word knowledge and comprehension. With regard to expressing ideas, students are to provide their ideas by speaking or other communication modes appropriate for the individual student. The assessment is designed in the recognition that many students at the P/SI levels rely on multiple modes of language, including listening, viewing, speaking, and visual representation.

While item difficulty varies some for each grade cluster MI-Access Participation and Supported Independence v1.5 ELA assessment, the general organization of the assessments is the same. The assessment activities are based on three adult life contexts (community experience, daily living skills, and employment) and comprised of three distinct components (word study, comprehension, and expressing ideas). The components are described below.

Word Study: Part one of the P/SI v1.5 assessments is called Word Study. Students are asked to participate in assessment activities that measure their ability to access or recognize highly familiar and frequently encountered words in print or a picture representing the printed words while participating in a performance context that typically occurs in the classroom.

Comprehension: Part two of the assessment is called Comprehension. Students participate in assessment activities that allow them to access various forms of information that are based on the three adult life contexts.

Expressing Ideas: Part three of the assessment is called expressing ideas. Students respond participate in activities that provide the student opportunities to express their ideas by writing, drawing, dictating, gestures or using a combination of response modes.

Mathematics

The APWT mathematics sub-group recommended that the MI-Access Participation and Supported Independence v1.5 Mathematics Assessments have four overarching areas of focus: (1) numbers and operations, (2) data analysis, (3) geometry, and (4) measurement. However, algebra is a focus for Supported Independence v1.5 in the middle school and high school assessments. The assessment is designed in the recognition that many students at the P/SI levels access and work with information in a variety of ways, including reading and writing, listening, viewing, speaking, and visual representation. The number of items and inclusion of specific aspects of each focus area change across grades. The blueprint is available in the MI-Access Participation and Supported Independence v1.5 Assessment Plan (MDE, 2007). The charts below show the breakdown of items in each of the areas of the assessment.

While item difficulty varies on specific grade-level MI-Access Participation and Supported Independence v1.5 mathematics assessments, they generally are designed the same way.

All items are provided in a real-world context.

Hands-on materials or objects—such as coins, clocks, and so forth—may be used as long as the material or object does NOT change the nature of a question or elicit a different response.

Universal Design

Throughout the item development phase (including item review following the Pilot, elements of universal design (Thompson, Johnstone, & Thurlow, 2002) were employed. The elements that were emphasized during item development included:

1. simple, clear, commonly-used words should be used, and any unnecessary words should be eliminated;
2. when technical terms must be used, they should be clearly defined;
3. compound/complex sentences should be broken down into several short sentences, stating the most important ideas first;
4. only one idea, fact, or process should be introduced at a time, then develop the ideas logically;
5. all noun-pronoun relationships should be made clear;
6. when time and setting are important to the sentence, place them at the beginning of the sentence;
7. when presenting instructions, sequence steps in the exact order of the occurrence; and
8. if processes are being described, they should be simply illustrated, labeled, and placed close to the text they support.

2.3 Fall 2006 Pilot Administration

In fall 2006, the P/SI v1.5 assessment activities were field tested throughout the state to obtain teacher feedback on aspects such as whether or not the activities are easy to understand in relationship to (1) the academic content being assessed, (2) what should be observed, and (3) what the role of the Primary Assessment Administrator was and the Shadow Assessment Administrator, and (4) if the scoring rubrics were easy to learn and apply in order to score the student responses.

Form Development

Three forms were developed at each of the following grade levels/grade clusters for Participation and Supported Independence v1.5: 3-5, 6-8, and 11. Each of the three forms contained both ELA and mathematics items. On each of the three Participation v1.5 assessment forms, there were 12 items (6 ELA and 6 mathematics). On each of the three Supported Independence v1.5 forms, there were 15 items (7 ELA and 8 mathematics).

For both Participation and Supported Independence v1.5, grades 3-5 were administered the same 3 forms and grades 6-8 were administered the same 3 forms.

Tables 2.1 through 2.7 contain summary information regarding the Pilot Participation v1.5 forms, including the number of students assessed at each grade level on each form, as well as gender breakdown and ethnicity breakdowns by grade and form.

Table 2.1
Fall 2006 Pilot Participation by Grade and Form—Participation v1.5

Grade	Form			Total
	1	2	3	
3	89	78	91	258
4	81	69	80	230
5	78	75	105	258
6	86	95	59	240
7	63	104	73	240
8	70	84	75	229
11	77	71	57	205
Total	544	576	540	1660

Table 2.2
Fall 2006 Pilot Participation by Grade and Form—Supported Independence v1.5

Grade	Form			Total
	1	2	3	
3	139	146	168	453
4	115	149	139	403
5	138	129	153	420
6	137	108	155	400
7	143	148	170	461
8	189	134	192	515
11	139	123	163	425
Total	1000	937	1140	3077

Table 2.3
Fall 2006 Pilot Participation by Grade, Form, and Gender (including missing gender)—Participation v1.5

Grade	Form	Gender			Total
		Missing	Female	Male	
3	1	2	28	59	89
	2	2	26	50	78
	3	0	35	56	91
4	1	0	34	47	81
	2	0	27	42	69
	3	0	30	50	80
5	1	0	33	45	78
	2	1	22	52	75
	3	1	47	57	105
6	1	0	34	52	86
	2	0	33	62	95
	3	0	20	39	59
7	1	1	29	33	63
	2	1	41	62	104
	3	1	27	45	73
8	1	3	24	43	70
	2	1	42	41	84
	3	1	33	41	75
11	1	0	35	42	77
	2	1	33	37	71
	3	0	18	39	57

Table 2.4

Fall 2006 Pilot Participation by Grade, Form, and Gender (including missing gender)—Supported Independence v1.5

Grade	Form	Gender			Total
		Missing	Female	Male	
3	1	1	37	101	139
	2	0	44	102	146
	3	1	59	108	168
4	1	0	29	86	115
	2	0	48	101	149
	3	0	48	91	139
5	1	0	61	77	138
	2	0	39	90	129
	3	0	53	100	153
6	1	2	42	93	137
	2	1	38	69	108
	3	0	52	103	155
7	1	4	36	103	143
	2	1	48	99	148
	3	1	64	105	170
8	1	8	57	124	189
	2	1	47	86	134
	3	2	71	119	192
11	1	0	48	91	139
	2	2	55	66	123
	3	1	61	101	163

Table 2.5

Fall 2006 Pilot Participation by Grade, Form, and Ethnicity—Participation v1.5

Grade	Form	Ethnicity							Total
		American Indian or Alaskan Native	Asian or Pacific Islander	Black, Not of Hispanic Origin	Hispanic	White, Not of Hispanic Origin	Multi-racial	Missing	
3	1	0	1	26	3	54	2	0	86
	2	0	3	12	7	49	4	0	75
	3	1	5	11	5	65	4	0	91
4	1	0	1	29	3	47	1	0	81
	2	0	2	15	4	46	2	0	69
	3	0	1	15	2	62	0	0	80
5	1	1	1	19	4	51	2	0	78
	2	0	1	17	4	49	2	0	73
	3	0	4	22	6	66	5	0	103
6	1	0	3	33	5	44	0	0	85
	2	1	3	16	5	65	3	0	93
	3	1	0	11	4	42	1	0	59
7	1	0	1	20	1	37	3	0	62
	2	2	3	27	4	65	0	0	101
	3	0	3	15	3	49	3	0	73
8	1	0	1	10	3	55	1	0	70
	2	0	1	15	1	63	3	0	83
	3	0	0	19	4	50	1	0	74
11	1	1	1	21	4	48	2	0	77
	2	0	1	24	1	43	1	0	70
	3	1	0	19	3	31	3	0	57

Table 2.6
Fall 2006 Pilot Participation by Grade, Form, and Ethnicity—Supported Independence v1.5

Grade	Form	Ethnicity							Total
		American Indian or Alaskan Native	Asian or Pacific Islander	Black, Not of Hispanic Origin	Hispanic	White, Not of Hispanic Origin	Multi-racial	Missing	
3	1	0	2	35	5	89	3	0	134
	2	3	5	31	7	95	3	0	144
	3	1	3	52	9	94	6	1	166
4	1	0	1	25	4	83	1	0	114
	2	2	1	34	8	96	8	0	149
	3	1	4	40	4	87	2	0	138
5	1	1	5	31	6	92	1	0	136
	2	4	5	32	7	77	3	0	128
	3	2	2	47	4	87	8	0	150
6	1	1	2	30	5	91	2	0	131
	2	0	1	22	7	74	1	0	105
	3	2	1	61	6	72	7	0	149
7	1	3	3	28	3	102	1	0	140
	2	2	6	29	4	100	4	0	145
	3	0	3	52	4	97	7	0	163
8	1	1	0	43	5	136	3	0	188
	2	1	4	35	5	83	4	0	132
	3	1	1	36	12	125	9	0	184
11	1	1	2	28	4	100	4	0	1
	2	0	2	13	7	94	2	0	0
	3	0	5	49	0	103	3	0	0

Table 2.7
Fall 2006 Pilot Participation by Ethnicity Across Grades and Assessments

Ethnicity	Percent
White	24.7
Black	65.7
Hispanic	4.1
Multiracial	2.7
Other	2.8
Total	100.0

Item Review and Data Preparation

The TAC reviewed all item analysis reports prior to item review. During item review, content and sensitivity review committees reviewed all item analysis reports and completed item review forms. The forms employed to record the decisions per item were identical to the ones shown in Figures 2.1 and 2.2.

On December 6-7, 2006, sensitivity review committees (SRC) and content advisory committees (CAC) were held so that educators, administrators, parents, and other stakeholders could review the pilot items with their data. The SRC and CAC members were selected by Peggy Dutcher, Manager for the Assessment for Students with Disabilities Program in the Office of Educational Assessment and Accountability (OEAA). To recruit committee members, MI-Access District Coordinators were sent nomination forms to elect qualified classroom teachers, administrators, counselors, and diagnosticians to participate in the SRC and CAC meetings. District coordinators were asked to nominate candidates based on a number of requisites, particularly candidates' educational position and their experience with students who are part of the Participation and/or Supported Independence population. In addition to education professionals, parents of students with disabilities, community leaders, and members of the business community were invited to participate. Committee member selections were also made to reflect the diversity of the state of Michigan. From these nomination forms, a variety of qualified persons were selected to attend the SRC and CAC meetings.

The SRC was charged with reviewing the items and their data and to ensure they were free of bias, elitism, stereotypes, etc. The CAC was charged with reviewing the items and their data to ensure that they were developmentally appropriate and measured the grade level content expectations. Before each committee reviewed the items and data, Peggy Dutcher gave a brief overview of the MI-Access assessment program, explained the purpose the meeting, and clarified the role of each committee member. A staff member from the contractor then gave a detailed presentation of the item data and how the data should be used to inform committee members' judgment on the items.

Figure 2.1 gives an example of the item-level data that was presented to the CAC and SRC panelists. The number and percent of students assigned each score point by the PAA and SAA was presented, as well as the average score by rater and the combined average score. Figure 2.2 is an example for the same item of the interrater data that was also presented to the committees. The interrater data is on grades combined and shows the agreement between PAA and SAA scores. Note that at the time of the SRC/CAC meeting, the OEAA had not yet received a recommendation from the TAC about how PAA and SAA scores would be handled. Due to the small number of students who participated in the assessment, DIF analyses were not possible to generate.

Figure 2.1
Example of Item Level Data for SRC/CAC

Form: **PPe-1** Item #: **1** Item Code: **E-PA-C-CP-R-NT.e.EG02-06-09**

	Grade 3 (N=89)				**Grade 4** (N=91)				**Grade 5** (N=-78)			
	PAA		SAA		PAA		SAA		PAA		SAA	
Score	#	%	#	%	#	%	#	%	#	%	#	%
3	22	24.7	21	23.6	14	17.3	12	14.8	10	12.8	10	12.8
2	15	16.9	13	14.6	19	23.5	20	24.7	7	9.0	8	10.3
1	6	6.7	7	7.9	8	9.9	8	9.9	8	10.3	6	7.7
A	18	20.2	18	20.2	19	23.5	19	23.5	19	24.4	18	23.1
B	8	9.0	8	9.0	9	11.1	8	9.9	13	16.7	13	16.7
C	17	19.1	18	20.2	12	14.8	14	17.3	20	25.6	22	28.2
Multi	3	3.4	2	2.2	0	0.0	0	0.0	1	1.3	1	1.3
Blank	0	0.0	2	2.2	0	0.0	0	0.0	0	0.0	0	0.0
Average Score	1.1		1.1		1.1		1.0		0.7		0.7	
	Combined: 2.2				Combined: 2.1				Combined: 1.3			

Figure 2.2
Example of Item Level Data for SRC/CAC

PAA Score	**% of Students at PAA and SAA score points (N=248)**							
	SAA Score							
	3	2	1	A	B	C	Multi	Blank
3	17.3	1.2						
2		14.5	0.8	0.8				0.4
1		0.8	7.3	0.4		0.4		
A				20.6	0.8	1.2		
B			0.4		10.9	0.8		
C				0.4		19.4		
Multi							1.2	0.4
Blank								

When reviewing the items and the data, committee members completed forms such as the ones shown in Figures 2.3 and 2.4.

Figure 2.3
Example of Content Advisory Committee Data/Item Review Form

MI-Access Participation & Supported Independence v1.5
Content Advisory Committee
Data/Item Review Meeting
December 7, 2006

PARTICIPATION V1.5
MIDDLE SCHOOL LEVEL ENGLISH LANGUAGE ARTS

REVIEWER NAME: _____ **DATE:** _____

FORM NUMBER _____

DIRECTIONS:
Please use the review sheets to rate each item according to the following 7 criteria and then make a final recommendation to use (U), revise (R), or do not use (DNU) each item.

	#1 Accurate Link to ECLCE/EHSCE	#2 The item is worded clearly.	#3 If item has "such ases, or examples" are they appropriate for the student's chronological age?	#4 Clear Scoring Focus	#5 Correct Answer is Observable	#6 Best Performance Context for the item	#7 Appropriate Item Difficulty Level	Final Recommendation: Use U, Revise R, or DNU?	Comments
ITEM #									
01	yes no	yes no	yes no	yes no	yes no	yes no	yes no	U R DNU	
02	yes no	yes no	yes no	yes no	yes no	yes no	yes no	U R DNU	

Figure 2.4
Example of Sensitivity Review Committee Data/Item Review Form

MI-Access Functional Independence
Sensitivity Review Committee
December 6, 2006

PARTICIPATION V1.5 PILOT

REVIEWER NAME: _____ FORM NUMBER: _____

Circle One: Elementary Middle School High School

DIRECTIONS:
Please use the review sheets to rate each item according to the following 5 criteria and then make a final recommendation to use (U) revise (R), or do not use (DNU) each item. Please refer to the *MI-Access Sensitivity Review Criteria* document for an explanation of the rating criteria.

	#1 Stereotypes?	#2 Erroneous Group Representation?	#3 Controversial Material?	#4 Contextual Concerns?	#5 Elitism, Ethnocentrism, Etc.?	Final Recommendation: Use U, Revise R, or DNU?	Comments
Item #							
1	yes no	yes no	yes no	yes no	yes no	U R DNU	
2	yes no	yes no	yes no	yes no	yes no	U R DNU	

After the committees reviewed the items, some items were deleted and others were revised for future field testing. The chart below shows the number of items that were available for operational forms, as well as the number of items that were revised or dropped.

Table 2.8
Summary of SRC and CAC Item Decisions

	SRC		CAC for ELA		CAC for Mathematics	
	Participation	**SI**	**Participation**	**SI**	**Participation**	**SI**
Used	96	117	32	41	44	49
Revised	4	1	17	11	1	2
Dropped	2	0	5	3	2	3

Subgroup Analysis for Fall 2006 Pilot

For Participation v1.5, summary statistics by form and grade are given by gender in Table 2.9 and by White students and Black students in Table 2.10. The ELA results are given in the top half of each table and the mathematics results are given in the bottom portion of each table. Since there were fewer than 10 students in each of the other ethnic groups, summary statistics are not reported for these subgroups. For Supported Independence v1.5, the summary statistics by form and grade are given by gender in Table 2.11 and by White students and Black students in Table 2.12. The ELA results are given in the top half of each table and the mathematics results are given in the bottom portion of each table. With one exception, there were fewer than 10 students in any of the other ethnic groups and so summary statistics are not reported for these groups. Even the one exception only had 12 students.

Observations about the pattern of performance between genders and between White and Black students are not given for the Fall 2006 pilot forms for the following reasons: no stakes were attached to the pilot testing; sample sizes are small for each form and grade; and even if common forms were combined across grades, it would be difficult at best to observe patterns within the elementary and middle school grade groups when three different forms are given within each grade group. Observations about the pattern of results between genders and between White and Black students are given in Section 2.4 under the heading *Subgroup Analysis for Spring 2007*.

Table 2.9

Fall 2006 Pilot Form Score Summaries by Gender and Test Form—Participation v1.5

TEST FORM	Grade	Male			Female		
		Mean	SD	N	Mean	SD	N
PPe-1	3	17.54	10.53	59	13.75	10.43	28
PPe-2	3	15.40	11.48	50	12.65	11.28	26
PPe-3	3	19.07	11.12	56	16.20	11.90	35
PPe-1	4	14.26	10.12	47	15.71	10.45	34
PPe-2	4	14.55	10.37	42	13.59	12.11	27
PPe-3	4	14.06	10.76	50	15.10	11.07	30
PPe-1	5	10.16	9.86	45	14.58	11.28	33
PPe-2	5	13.69	12.47	52	13.50	10.79	22
PPe-3	5	15.79	9.64	57	12.81	9.96	47
PPm-1	6	13.50	10.45	52	13.76	10.16	34
PPm-2	6	11.79	9.07	62	12.27	11.00	33
PPm-3	6	14.46	11.26	39	14.55	10.12	20
PPm-1	7	12.73	10.48	33	10.48	9.99	29
PPm-2	7	15.74	10.38	62	12.00	9.01	41
PPm-3	7	14.76	10.56	45	13.00	10.82	27
PPm-1	8	18.05	11.78	43	12.21	11.48	24
PPm-2	8	12.29	10.48	41	13.79	10.30	42
PPm-3	8	14.12	10.37	41	18.36	12.43	33
PPh-1	11	17.00	11.05	42	13.34	10.68	35
PPh-2	11	14.92	10.51	37	14.06	9.42	33
PPh-3	11	15.97	11.23	39	16.50	10.60	18

TEST FORM	Grade	Male			Female		
		Mean	SD		Grade	Mean	SD
PPe-1	3	18.85	10.52	59	14.57	11.62	28
PPe-2	3	17.82	11.96	50	15.38	12.21	26
PPe-3	3	18.59	11.71	56	12.54	11.22	35
PPe-1	4	15.26	10.33	47	17.38	11.16	34
PPe-2	4	16.10	10.64	42	14.15	11.10	27
PPe-3	4	14.26	11.11	50	11.83	11.61	30
PPe-1	5	13.09	11.75	45	14.97	11.98	33
PPe-2	5	14.56	13.26	52	13.59	12.81	22
PPe-3	5	15.88	10.89	57	12.04	11.36	47
PPm-1	6	13.81	10.55	52	11.68	11.22	34
PPm-2	6	15.40	9.86	62	11.61	10.76	33
PPm-3	6	15.87	12.98	39	16.65	12.95	20
PPm-1	7	13.79	12.09	33	9.14	9.55	29
PPm-2	7	17.19	11.45	62	12.02	10.63	41
PPm-3	7	18.09	11.94	45	15.85	12.64	27
PPm-1	8	18.98	12.11	43	14.25	11.34	24
PPm-2	8	13.37	10.16	41	15.38	10.81	42
PPm-3	8	17.41	12.59	41	19.97	13.89	33
PPh-1	11	18.38	11.73	42	16.11	11.57	35
PPh-2	11	17.38	12.08	37	13.73	10.46	33
PPh-3	11	18.00	12.08	39	18.06	12.10	18

NOTE: ELA score summaries are shown first and then mathematics score summaries.

Table 2.10

Fall 2006 Pilot Form Score Summaries by Ethnicity and Test Form—Participation v1.5

TEST FORM	Grade	White			Black		
		Mean	SD	N	Mean	SD	N
PPe-1	3	16.87	11.25	54	15.50	10.06	26
PPe-2	3	14.02	11.11	49	21.25	13.29	12
PPe-3	3	18.12	11.07	65	16.73	11.19	11
PPe-1	4	15.38	10.05	47	14.21	10.34	29
PPe-2	4	16.39	10.52	46	11.60	11.98	15
PPe-3	4	14.61	10.77	62	12.13	10.72	15
PPe-1	5	11.53	10.79	51	13.11	10.59	19
PPe-2	5	12.20	11.44	49	16.65	12.40	17
PPe-3	5	14.27	9.80	66	16.55	10.51	22
PPm-1	6	14.57	10.35	44	12.70	9.91	33
PPm-2	6	11.09	9.27	65	16.56	11.78	16
PPm-3	6	13.43	9.86	42	22.27	10.90	11
PPm-1	7	13.38	10.32	37	8.70	10.10	20
PPm-2	7	14.60	9.85	65	16.22	10.00	27
PPm-3	7	13.78	9.95	49	16.07	13.67	15
PPm-1	8	16.60	11.50	55	14.50	12.52	10
PPm-2	8	13.71	10.22	63	11.13	11.07	15
PPm-3	8	14.78	10.71	50	20.11	13.32	19
PPh-1	11	16.00	10.65	48	16.95	11.71	21
PPh-2	11	14.63	10.02	43	14.17	10.72	24
PPh-3	11	13.06	10.30	31	20.68	10.56	19

TEST FORM	Grade	White			Black		
		Mean	SD	N	Mean	SD	N
PPe-1	3	18.30	11.44	54	17.23	9.82	26
PPe-2	3	17.84	12.17	49	22.00	11.69	12
PPe-3	3	16.51	11.33	65	14.36	13.54	11
PPe-1	4	18.04	11.15	47	13.24	9.64	29
PPe-2	4	17.57	10.28	46	10.47	11.33	15
PPe-3	4	13.58	11.34	62	12.40	12.15	15
PPe-1	5	14.12	11.78	51	11.74	11.80	19
PPe-2	5	12.63	12.56	49	17.76	14.99	17
PPe-3	5	13.24	11.17	66	17.68	11.18	22
PPm-1	6	14.48	11.34	44	12.18	10.48	33
PPm-2	6	12.45	9.95	65	20.56	10.60	16
PPm-3	6	15.26	12.26	42	23.36	12.46	11
PPm-1	7	13.27	11.63	37	8.85	10.34	20
PPm-2	7	15.25	11.27	65	18.07	11.78	27
PPm-3	7	17.98	11.95	49	18.00	14.38	15
PPm-1	8	17.40	11.88	55	16.60	12.72	10
PPm-2	8	14.87	10.52	63	14.93	11.03	15
PPm-3	8	17.60	12.97	50	22.00	14.69	19
PPh-1	11	18.10	11.50	48	19.00	12.28	21
PPh-2	11	15.81	11.48	43	14.08	11.72	24
PPh-3	11	15.03	11.80	31	23.21	10.77	19

NOTE: ELA score summaries are shown first and then mathematics score summaries.

Table 2.11
Fall 2006 Pilot Form Score Summaries by Gender and Test Form—
Supported Independence v1.5

TEST FORM	Grade	Male			Female		
		Mean	SD	N	Mean	SD	N
PSIe-1	3	17.85	7.45	101	18.30	5.54	37
PSIe-2	3	16.15	7.75	102	18.25	7.45	44
PSIe-3	3	16.94	7.25	108	16.97	8.30	59
PSIe-1	4	19.07	6.63	86	18.69	7.38	29
PSIe-2	4	17.53	6.82	101	18.88	5.86	48
PSIe-3	4	17.22	7.20	91	19.29	6.85	48
PSIe-1	5	20.30	6.35	77	20.07	6.52	61
PSIe-2	5	19.06	6.69	90	19.67	6.52	39
PSIe-3	5	16.65	8.19	100	20.11	5.96	53
PSIm-1	6	14.46	7.25	93	18.33	6.01	42
PSIm-2	6	14.51	7.26	69	16.16	6.00	38
PSIm-3	6	15.71	7.04	103	16.54	6.58	52
PSIm-1	7	16.87	6.66	103	17.78	7.26	36
PSIm-2	7	16.78	6.65	99	16.94	6.86	48
PSIm-3	7	14.87	8.13	105	14.61	8.51	64
PSIm-1	8	17.72	6.99	124	18.47	7.79	57
PSIm-2	8	17.77	6.78	86	15.53	7.35	47
PSIm-3	8	14.27	7.40	119	17.70	6.93	71
PSIh-1	11	18.49	6.63	91	20.35	6.17	48
PSIh-2	11	17.30	7.20	66	20.31	5.58	55
PSIh-3	11	17.01	7.87	101	17.54	8.03	61
TEST FORM	Grade	Male			Female		
		Mean	SD	N	Mean	SD	N
PSIe-1	3	16.81	7.46	101	15.38	5.75	37
PSIe-2	3	13.15	8.63	102	15.02	8.26	44
PSIe-3	3	15.78	7.80	108	15.75	8.08	59
PSIe-1	4	17.19	7.32	86	17.72	8.24	29
PSIe-2	4	14.97	8.10	101	15.13	7.97	48
PSIe-3	4	16.34	7.61	91	18.75	7.02	48
PSIe-1	5	18.23	6.91	77	17.62	6.84	61
PSIe-2	5	16.50	8.09	90	14.72	6.86	39
PSIe-3	5	14.86	8.87	100	18.57	7.33	53
PSIm-1	6	15.00	7.22	93	17.98	5.89	42
PSIm-2	6	13.17	8.10	69	14.34	6.38	38
PSIm-3	6	14.89	7.77	103	14.65	8.06	52
PSIm-1	7	17.29	7.25	103	17.31	7.17	36
PSIm-2	7	14.51	7.38	99	15.31	7.17	48
PSIm-3	7	14.20	7.64	105	14.16	7.70	64
PSIm-1	8	17.89	7.46	124	18.82	7.88	57
PSIm-2	8	17.23	7.15	86	15.47	7.88	47
PSIm-3	8	14.02	7.79	119	16.70	7.42	71
PSIh-1	11	18.00	7.49	91	18.35	6.74	48
PSIh-2	11	17.08	7.71	66	19.64	6.59	55
PSIh-3	11	16.82	7.25	101	16.89	7.98	61

NOTE: ELA score summaries are shown first and then mathematics score summaries.

Table 2.12
Fall 2006 Pilot Form Score Summaries by Ethnicity and Test Form—
Supported Independence v1.5

TEST FORM	Grade	White			Black		
		Mean	SD	N	Mean	SD	N
PSIe-1	3	18.58	6.77	89	16.71	7.68	35
PSIe-2	3	16.71	8.00	95	17.23	7.27	31
PSIe-3	3	17.83	7.08	94	15.85	8.25	52
PSIe-1	4	19.41	6.70	83	18.56	6.62	25
PSIe-2	4	18.48	6.31	96	15.65	7.35	34
PSIe-3	4	18.37	6.57	87	17.53	8.17	40
PSIe-1	5	20.27	6.34	92	19.87	6.25	31
PSIe-2	5	19.26	6.58	77	20.22	6.45	32
PSIe-3	5	18.40	7.26	87	16.45	8.63	47
PSIm-1	6	16.93	6.44	91	12.43	7.61	30
PSIm-2	6	14.42	6.78	74	16.00	6.27	22
PSIm-3	6	16.01	6.86	72	16.18	6.97	61
PSIm-1	7	17.52	6.84	102	15.64	7.21	28
PSIm-2	7	17.00	6.58	100	15.24	7.54	29
PSIm-3	7	15.34	8.31	97	13.37	7.90	52
PSIm-1	8	18.39	7.05	136	16.00	7.23	43
PSIm-2	8	15.58	7.65	83	19.57	4.58	35
PSIm-3	8	15.53	7.60	125	15.31	6.47	36
PSIh-1	11	19.52	6.12	100	18.21	7.88	28
PSIh-2	11	18.80	6.50	94	17.15	9.20	13
PSIh-3	11	17.71	8.28	103	16.78	7.27	49

TEST FORM	Grade	White			Black		
		Mean	SD	N	Mean	SD	N
PSIe-1	3	17.21	6.76	89	14.57	7.83	35
PSIe-2	3	13.28	8.96	95	14.55	7.68	31
PSIe-3	3	16.56	7.53	94	14.65	8.26	52
PSIe-1	4	17.82	7.68	83	17.24	6.94	25
PSIe-2	4	15.50	7.95	96	13.35	8.09	34
PSIe-3	4	18.07	6.72	87	15.80	8.59	40
PSIe-1	5	18.36	6.98	92	16.87	6.59	31
PSIe-2	5	16.83	7.72	77	15.41	7.80	32
PSIe-3	5	16.38	8.21	87	15.26	9.03	47
PSIm-1	6	16.81	6.61	91	13.23	7.74	30
PSIm-2	6	12.99	7.48	74	14.86	6.74	22
PSIm-3	6	14.22	7.91	72	15.48	7.66	61
PSIm-1	7	17.72	7.13	102	15.36	7.73	28
PSIm-2	7	14.94	7.18	100	12.38	7.73	29
PSIm-3	7	14.69	7.64	97	13.54	7.79	52
PSIm-1	8	18.17	7.42	136	17.07	8.19	43
PSIm-2	8	15.33	7.68	83	19.89	5.68	35
PSIm-3	8	14.54	7.43	125	14.97	7.87	36
PSIh-1	11	18.34	6.76	100	17.11	8.58	28
PSIh-2	11	18.33	7.27	94	16.92	8.27	13
PSIh-3	11	17.30	7.64	103	16.65	7.29	49

NOTE: ELA score summaries are shown first and then mathematics score summaries.

2.4 Spring 2007 Operational Administration

Form Design

Based on the results of the Fall 2006 Pilot Administration, several modifications were made to the booklet blueprints. Core items were selected based on the review of Sensitivity Review Committees and Content Advisory Committees (December, 2006). Items that best reflected the item specifications and the intent of the EGLCEs and EHSCEs assessable at the state level were selected. Selected core items:

1. are free of ethnic/gender bias;
2. reflect a range of item difficulty;
3. are free of biasing elements as outlined by the OEAA;
4. meet sensitivity criteria as outlined by the OEAA;

Each form also has designated field-test item positions that were reviewed by SRC and CAC panels in December 2006.

Table 2.13
English Language Arts Blueprint for Participation v1.5

Participation v1.5 English Language Arts: Grades 3-8 and 11		
English Language Arts Assessment Components	**Number Core Items***	**Number Embedded Field Test Items***
Accessing Information	**6**	**3**
Word Study	3	1
Comprehension	3	2
Expressing Ideas	**4**	**2**
Total Number of Items on Test	10	5

Table 2.14
English Language Arts Blueprint for Supported Independence v1.5

Supported Independence v1.5 English Language Arts: Grades 3-8 and 11		
English Language Arts Assessment Components	**Number Core Items***	**Number Embedded Field Test Items***
Accessing Information	**9**	**3**
Word Study	4	1
Comprehension	5	2
Expressing Ideas	**6**	**2**
Total Number of Items on Test	15	5

*The core items are those upon which students' scores are based. Embedded items are those that are placed in the assessment for field testing purposes to gather statistical data; performance on these items does not impact a student's score.

Table 2.15
Mathematics Blueprint for Participation v1.5

Participation v1.5 Mathematics Blueprint: Grades 3-8 and 11			
Domain(# of Items)	**Topic**	**Number Core Items**	**Number Embedded Field Test Items**
Numbers & Operations	Count, Write and Order Whole Numbers	1	
	Compute with Whole Numbers	0	1
	Problem Solving and Estimation	1	
	Fractions and Decimals	1	
Algebra	Expressions and Equations	Not Assessed	Not Assessed
Measurement	Measure and Use Units	1	2
	Money	1	
Geometry	Identify and Describe Shapes	1	
	Use Maps and Grids	2	1
	Patterns	1	
Data Analysis	Explore and Interpret Data	1	1
	TOTAL	10	5

Table 2.16
Mathematics Blueprint for Supported Independence v1.5 Grades 3-5

Supported Independence v1.5 Mathematics Blueprint: Grades 3-5			
Domain(# of Items)	**Topic**	**Number Core Items**	**Number Embedded Field Test Items**
Numbers & Operations	Count, Write and Order Whole Numbers	3	1
	Compute with Whole Numbers	1	
	Problem Solving and Estimation	1	
	Fractions and Decimals		
Algebra	Expressions and Equations		
Measurement	Measure and Use Units	3	2
	Money	1	
Geometry	Identify and Describe Shapes	1	
	Use Maps and Grids	1	1
	Patterns	2	
Data Analysis	Explore and Interpret Data	2	1
TOTAL		15	5

Table 2.17
Mathematics Blueprint for Supported Independence v1.5 Grades 6-8 and 11

Supported Independence v1.5 Mathematics Blueprint: Grades 6-8 and 11				
Domain (# of Items)	**Topic**	**Number Core Items**	**Number Embedded Field Test Items**	**Tentative Number Released Items**
Numbers & Operations	Count, Write and Order Whole Numbers	3	1	1
	Compute with Whole Numbers			
	Problem Solving and Estimation	1		
	Fractions and Decimals			
Algebra	Expressions and Equations	2	1	1
Measurement	Measure and Use Units	3	2	2
	Money	1		
Geometry	Identify and Describe Shapes	1		
	Use Maps and Grids	1	1	1
	Patterns	1		
Data Analysis	Explore and Interpret Data	2	1	1
TOTAL		15	5	5

Item Analysis

Item analysis was completed on all operational core items for each subject at each grade level. This analysis was completed to provide operational statistical information for the item bank.

Results

Following the completion of the first full statewide administration of MI-Access, the MDE will present statewide results in a booklet containing (a) state performance-level summary reports; (b) state frequency reports; (c) performance-level summaries disaggregated by gender, economic disadvantage, English language learner status, migratory status, mobility status, and ethnicity; and (d) a state participation rate report. Tables 2.20 and 2.21 contain performance level results from the spring 2007 administration of mathematics and ELA in grades 3 through 8 and 11. Tables 2.18 to 2.21 contain participation counts by grade and various demographics.

Table 2.18
Spring 2007 N-Counts by Ethnicity and Grade for ELA Participation v1.5

Grade	American Indian	Asian Pacific Islander	Black	Hispanic	White	Multi-Racial	Other	Total
3	*	*	73	13	240	*	*	339
4	*	*	69	11	177	*	*	265
5	*	*	77	14	202	*	*	304
6	*	*	60	19	195	*	*	285
7	*	*	71	11	181	*	*	274
8	*	*	72	*	210	*	*	301
11	*	*	82	*	171	*	*	271

* < 10 students assessed

Table 2.19
Spring 2007 N-Counts by Ethnicity and Grade for ELA Supported Independence v1.5

Grade	American Indian	Asian Pacific Islander	Black	Hispanic	White	Multi-Racial	Other	Total
3	*	16	129	29	303	*	*	488
4	*	*	120	20	333	*	*	487
5	*	13	115	21	319	*	*	482
6	*	12	138	22	332	*	*	514
7	*	23	175	15	373	*	*	593
8	*	*	167	19	403	*	*	602
11	*	13	172	22	425	*	*	643

* < 10 students assessed

Table 2.20
Spring 2007 N-Counts by Ethnicity and Grade for Mathematics Participation v1.5

Grade	American Indian	Asian Pacific Islander	Black	Hispanic	White	Multi-Racial	Other	Total
3	*	*	73	13	240	*	*	339
4	*	*	68	11	176	*	*	263
5	*	*	77	14	201	*	*	303
6	*	*	60	19	195	*	*	285
7	*	*	71	11	181	*	*	274
8	*	*	72	*	209	*	*	300
11	*	*	82	*	171	*	*	271

* < 10 students assessed

Table 2.21
Spring 2007 N-Counts by Ethnicity and Grade for Mathematics
Supported Independence v1.5

Grade	American Indian	Asian Pacific Islander	Black	Hispanic	White	Multi-Racial	Other	Total
3	*	16	129	29	303	*	*	488
4	*	*	120	20	328	*	*	482
5	*	13	115	21	318	*	*	482
6	*	12	139	22	331	*	*	514
7	*	23	175	15	372	*	*	592
8	*	*	167	19	403	*	*	602
11	*	13	172	22	422	*	*	640

* < 10 students assessed

Subgroup Analysis for Spring 2007

Summary statistics by gender and grade and by ethnicity and grade for both content areas for Participation and Supported Independence v1.5 are given in Tables 2.22 to 2.29. Summary statistics by ethnicity are given for White students, Black students, and Other students. Excluding White and Black students, Other students combines all other ethnic subgroups but consists primarily of Hispanic students.

For ELA Participation v1.5, with the exception of grade 6, males scored higher than females although only by a small amount at grades 8 and 11. For grade 6, females scored noticeably higher than males. For ELA Supported Independence, females scored higher than males across all grades although the differences were small at grades 5 and 7. For mathematics Participation v1.5, males outperformed females at most grades except at grade 6 females outperformed males and at grade 8 the two groups scored similarly. For mathematics Supported Independence v1.5, females scored higher than males at grades 3 to 6, males scored higher at grades 7 and 8, and the two groups scored the same at grade 11..When considering the elementary grade group (grades 3 – 6) and the middle school grade group (grades 6 – 8) across both content areas and both levels, the following patterns are observed: males outperformed females at the elementary grades for both ELA and mathematics Participation v1.5; females outperformed males at elementary and middle school for ELA Supported Independence v1.5 and at the elementary grades for mathematics Supported Independence v1.5. For high school, grade 11, males scored higher than females on both ELA and mathematics Participation v1.5, females scored higher than males for ELA Supported Independence v1.5, and the two groups scored similarly for mathematics Supported Independence v1.5.

At the elementary and middle school grade groups for both content areas and for both Participation and Supported Independence v1.5, there was no clear pattern of performance differences between the White and Black students. Within these grade groups, neither group scored consistently higher than the other group. At the elementary grades for ELA Participation, the White students scored very slightly higher than the Black students although it may be better to characterize their performance as similar. As individual grades across the four assessments, the White students outperformed the Black students at grade 7, although only slightly for ELA Supported Independence, whereas the Black students outperformed the White students at grade 8. At high school, grade 11, the White students scored higher than the Black students on all four assessments. With the exception of grade 3 Supported Independence v1.5, the n-count for the Other group was less than 50, often

less than 40, and occasionally even less than 30, and so the summary statistics for this group were not reviewed for a pattern.

Table 2.22
Spring 2007 Operational Form Score Summaries by Gender and Grade—ELA Participation v1.5

	Female			Male		
Grade	Mean	SD	N	Mean	SD	N
3	22.01	19.00	139	27.63	18.96	200
4	22.79	19.20	99	25.20	18.37	166
5	22.65	18.27	120	25.73	18.70	184
6	24.36	19.38	106	20.74	18.93	179
7	21.77	17.19	97	23.51	18.77	177
8	25.14	20.20	125	25.47	18.80	176
11	22.25	18.77	113	23.09	19.40	158

Table 2.23
Spring 2007 Operational Form Score Summaries by Gender and Grade—ELA Supported Independence v1.5

	Female			Male		
Grade	Mean	SD	N	Mean	SD	N
3	40.81	13.95	164	39.70	13.99	324
4	43.02	13.04	153	40.45	13.01	334
5	41.68	13.73	158	41.21	13.75	324
6	39.43	13.80	176	34.75	15.71	338
7	38.03	14.57	188	37.50	14.48	405
8	38.14	14.27	212	37.16	14.79	390
11	40.24	13.82	251	38.46	14.27	392

Table 2.24
Spring 2007 Operational Form Score Summaries by Gender and Grade—Mathematics Participation v1.5

	Female			Male		
Grade	Mean	SD	N	Mean	SD	N
3	23.27	18.72	139	30.72	18.92	200
4	23.52	18.75	99	27.27	19.01	164
5	21.00	18.79	119	26.82	19.38	184
6	25.88	20.86	106	23.31	20.00	179
7	22.78	18.91	97	25.86	19.28	177
8	27.57	21.35	125	27.79	20.57	175
11	23.52	20.05	113	27.30	21.44	158

Table 2.25
Spring 2007 Operational Form Score Summaries by Gender and Grade—Mathematics Supported Independence v1.5

	Female			Male		
Grade	Mean	SD	N	Mean	SD	N
3	37.47	15.62	163	36.71	15.32	325
4	38.87	14.73	152	37.41	15.07	330
5	39.79	15.27	159	39.02	15.77	323
6	34.91	14.82	176	29.91	16.66	338
7	31.96	16.16	188	33.34	15.38	404
8	32.71	15.94	212	33.51	16.31	390
11	37.16	14.51	250	37.22	15.01	390

Table 2.26
Spring 2007 Operational Form Score Summaries by Ethnicity and Grade—ELA Participation v1.5

	White			Black			Other		
Grade	Mean	SD	N	Mean	SD	N	Mean	SD	N
3	25.08	18.89	240	24.82	19.51	73	29.00	20.84	26
4	24.21	17.69	177	23.88	20.73	69	26.58	20.78	19
5	24.89	17.97	202	24.73	20.31	77	20.84	18.02	25
6	21.85	19.07	195	24.12	20.27	60	19.60	17.48	30
7	23.78	18.07	181	22.03	19.04	71	18.36	16.55	22
8	25.57	18.72	210	26.26	21.51	72	19.16	17.55	19
11	23.61	18.54	171	21.07	20.53	82	22.06	18.14	18

Table 2.27
Spring 2007 Operational Form Score Summaries by Ethnicity and Grade—ELA Supported Independence v1.5

	White			Black			Other		
Grade	Mean	SD	N	Mean	SD	N	Mean	SD	N
3	40.54	13.26	303	38.24	15.41	129	41.77	14.08	56
4	41.15	12.83	333	41.67	13.37	120	40.82	14.50	34
5	41.83	12.90	319	41.15	15.22	115	38.79	15.28	48
6	35.72	15.11	332	37.09	15.67	138	38.80	14.77	44
7	37.96	14.13	373	37.60	15.09	175	35.51	15.29	45
8	37.11	14.45	403	38.77	14.86	167	35.84	15.21	32
11	39.94	13.57	425	37.10	15.08	172	39.52	14.89	46

Table 2.28
Spring 2007 Operational Form Score Summaries by Ethnicity and Grade—Mathematics Participation v1.5

	White			Black			Other		
Grade	Mean	SD	N	Mean	SD	N	Mean	SD	N
3	27.18	18.62	240	28.00	20.31	73	31.15	21.20	26
4	26.38	18.13	176	24.59	21.11	68	25.58	19.34	19
5	24.90	18.51	201	23.77	20.71	77	23.96	22.02	25
6	24.13	20.24	195	24.35	21.89	60	25.00	18.13	30
7	25.62	19.06	181	24.55	20.17	71	18.50	16.14	22
8	28.07	19.93	209	28.61	23.42	72	20.11	20.29	19
11	27.09	20.85	171	23.54	21.34	82	22.78	19.49	18

Table 2.29
Spring 2007 Operational Form Score Summaries by Ethnicity and Grade—Mathematics Supported Independence v1.5

	White			Black			Other		
Grade	Mean	SD	N	Mean	SD	N	Mean	SD	N
3	37.64	14.57	303	34.65	17.10	129	38.68	15.46	56
4	37.98	14.68	328	37.81	15.74	120	37.03	15.30	34
5	39.39	15.05	318	39.92	16.66	115	37.04	16.64	49
6	31.10	15.76	331	32.60	17.37	139	32.45	15.99	44
7	33.45	15.41	372	32.10	16.27	175	31.53	15.00	45
8	32.75	15.97	403	34.65	16.28	167	31.78	18.18	32
11	37.85	14.17	422	35.19	16.45	172	38.74	13.58	46

CHAPTER 3

TEST ADMINISTRATION, SCORING, AND INTERPRETATION

3.1 Background

Decision-making Tools

To help IEP Teams decide which state assessment a student should take, the MDE developed:

- *Draft Guidelines for Determining Participation in State Assessment for Students with Disabilities* (MDE, 2006a*)*;
- a matrix matching student levels of independence, characteristics, curriculum, and instruction with possible state-level assessments;
- a decision-making flow chart (see Figure 3.1); and
- a decision-making checklist.

These materials—all of which were designed to ensure that students participate in the correct state-level assessment—are available online at www.mi.gov/mi-access. Some of the tools have also been made available in training materials and in *The Assist*, a newsletter published by the MI-Access staff.

Training

To ensure that the assessments are administered correctly, MI-Access hosts annual training conferences across the state.

Furthermore, the MDE has

- helped revise and update the *Individualized Education Program Team Manual* to help special education teams make more informed decisions about MI-Access;
- published a bi-monthly newsletter called *The Assist*, which informs a wide audience about assessing students with disabilities at the state level;
- developed a District MI-Access Coordinator Listserv to distribute time-sensitive information on MI-Access;
- published an annual manual that provides detailed instructions on what to do before, during, and after administering the MI-Access assessments;
- produced calendars, brochures, and other communication tools to continue to inform those involved with the assessment program about proper administration; and
- published an annual handbook, which explains how to interpret and use MI-Access results.

3.2 Determining Participation in MI-Access

During IEP Teams meetings, team members work collaboratively to determine which state-level assessment their students should take. The team members begin by asking: How independently will the student function as an adult? The guidelines for determining participation in state assessments for students with disabilities[5] (MDE, 2001) include the following questions to help guide IEP Team deliberations.

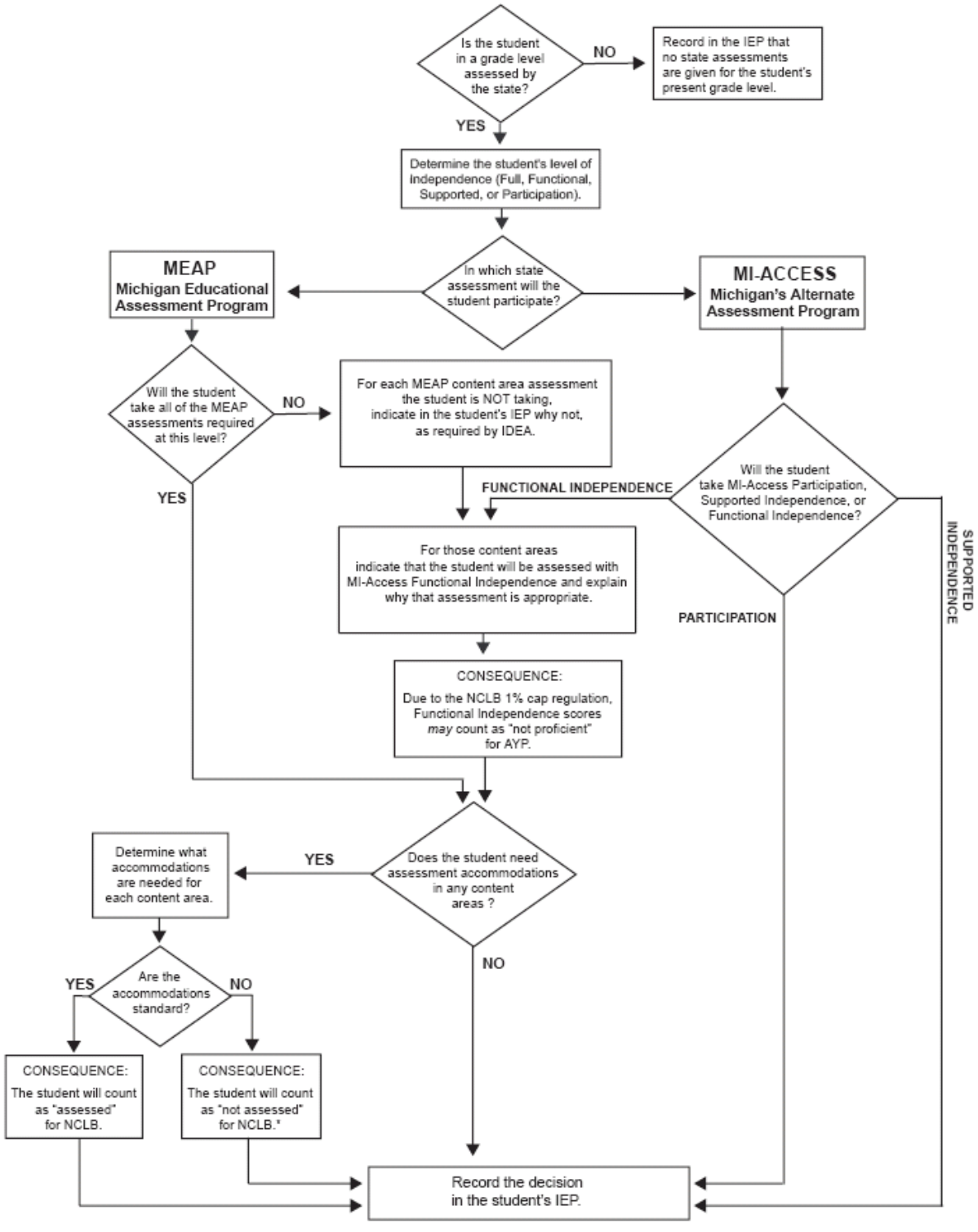
1. Where will this student live and with what supports?
2. In what daily activities will this student be involved and with what supports?
3. In what community experiences will this student be involved and with what supports?
4. What post-secondary educational opportunities will this student have and with what supports?
5. In what environment will this student be employed and with what supports?

Figure 3.1 is provided to educators each year in *The Assist*, a newsletter designed to provide information on how to help students with disabilities gain greater access to and progress in the general curriculum. This is intended to help the IEP teams select the appropriate assessment for each student.

[5] Standard 3.15. When using a standardized testing format to collect structured behavior samples, the domain, test design, test specifications, and materials should be documented as for any other test. Such documentation should include a clear definition of the behavior expected of the test takers, the nature of the expected responses, and any materials or directions that are necessary to carry out the testing.

Figure 3.1

IEP Team State Assessment Decision-Making Flow Chart



Students who are deemed eligible for MI-Access Participation v1.5 have, or function as if they have, severe or profound cognitive impairment. "These students are expected to require extensive ongoing support in adulthood" (MDE, 2001, p. 4).

Students who are deemed eligible for MI-Access Supported Independence v1.5 have, or function as if they have, moderate cognitive impairment. "These students will require ongoing support in major life roles" (MDE, 2001, p. 3).

Students who are deemed eligible for MI-Access Participation and Supported Independence v1.5 have, or function as if they have, mild cognitive impairment. "These students are capable of meeting their own needs and living successfully in their communities with minimal support from others" (MDE, 2001, p. 2).

3.3 Allowable Accommodations

The word "accommodation" is used to indicate that changes are made to what is considered the "standardized" test condition. Accommodations are tools and procedures that provide fair and reasonable instructional and assessment access for students with disabilities and ELLs in the areas of presentation, response, timing, scheduling, setting, and linguistics. According to Tindal and Fuchs (1999) a test change is considered an accommodation if it does not alter the construct being measured, is based on individual need, and is effective for students who need the change and not effective for others.

The Standards (AERA, APA, & NCME, 1999) require that "all examinees be given a comparable opportunity to demonstrate their standing on the construct(s) the test is intended to measure. Just treatment also requires such factors as appropriate testing conditions and equal opportunity to become familiar with the test format, practice materials, and so forth. Fairness also requires that all examinees be afforded appropriate testing conditions" (p.74).

The foundation of the MI-Access assessments were based on universal design principles--the premise that every child deserves to participate in assessment and that assessment results should not be affected by disability, gender, race, or English language ability. In addition, universally designed assessments aim to reduce the need for assessment accommodations by removing access barriers associated with the assessment themselves.

> The need for assessment accommodations can be reduced if assessments are developed thoughtfully and with the broad student assessment population clearly in mind. To that end, the APWT spent considerable time trying to define and understand the student population that would be participating in MI-Access FI. Furthermore, it recommended that barriers be removed whenever possible, such as (1) using graphs or pictures only when necessary and accompanying them with verbal/textual descriptions, (2) eliminating distracting or purely decorative pictures, (3) designing the assessments to be administered in multiple, short sessions to reduce the need for extra breaks or extended time, and (4) allowing multiple access and response modes to further reduce the need for assessment accommodations. At every turn, efforts to reduce barriers were explored to ensure that students would have every opportunity to participate fully and meaningfully in assessments (MDE, 2005b, p. 11).

Despite every effort to ensure that MI-Access assessments are accessible, it is understood that some students may still need assessment accommodations in order to participate fully and meaningfully in MI-Access. The use of allowable accommodations is based on individual student need, and the students IEP indicates that they are appropriate for the student. In addition, allowable accommodations are used consistently by the student throughout curricular instruction during the school year – they reflect what the student routinely uses or how he or she routinely responds during instruction. Students who are deemed eligible for accommodations have their accommodations documented in the IEPs, 504 Service Plans, and student files.

All P/SI v1.5 assessment items are designed to (1) reflect classroom activities with which students most likely are familiar, and (2) provide a performance context in which specific Michigan ELA and mathematics Draft EGLCEs and EHSCEs can be assessed. In addition, they are designed to be accessible to all students identified in their IEPs as taking the Participation v1.5 or Supported Independence v1.5 assessments. While some of the P/SI v1.5 assessment items will occur naturally in the classroom or school, others may require more detailed planning in order to observe a specific scoring focus. Therefore, PAAs need to plan ahead and be prepared to adjust the instructional environment as needed.

One important part of the planning process is becoming familiar with the individualized supports called for in each student's IEP, and having them on hand so the student can access the assessment items in ways that will allow him or her to demonstrate his or her ELA and mathematics knowledge and skills. For example, a student with visual impairment may need tactile graphics, a student with hearing impairment may need signing or a sound field system, and a student with some other disability may need a communication system and/or technology device to allow him or her to access the assessments and/or demonstrate what he or she has learned. All aids and materials used must (1) be chronologically age appropriate, (2) reflect what the student typically uses during instruction (in other words, do not introduce a new device or material during assessment administration), and (3) be documented in the student's IEP.

When IEP Teams are considering assistive and/or adaptive aids or other assessment accommodations for an individual student, they should consult the Michigan State Board of Education (SBE)-approved *Assessment Accommodation Summary Table*. The table indicates what assessment accommodations are considered standard or nonstandard for MI-Access.

Standard accommodations do not change what the specific assessment is measuring and therefore students assessed using standard accommodations are counted as assessed when calculating NCLB participation rates. A nonstandard assessment accommodation does change what the assessment is measuring and results in an invalid score. Hence, a student using a nonstandard assessment accommodation will not count as being assessed when calculating NCLB participation rates. The following standard accommodations are used most often on the MI-Access Participation and Supported Independence v1.5 assessments: audio versions, Braille and enlarged print, calculators, optional materials, readers, recording student responses, scribes, word processors, and time (MDE, 2005a).

3.4 Scoring Rubrics

Each Participation and Supported Independence v1.5 assessment activity is scored by two assessment administrators observing the activity at the same time. The MI-Access Participation v1.5 scoring rubric is a 3-point scoring rubric. The MI-Access Supported Independence v1.5 scoring rubric is a 2-point rubric. In January 2006, the TAC recommended that the PAA and SAA score for each item be added together in order to get a total score. Condition codes would count as zeros.

During the administration of each activity, the PAA and the SAA are instructed to circle the appropriate observation score for each item while they are observing the student. Each activity contains a scoring focus that describes what the student is required to demonstrate. The possible observation scores are shown in Tables 3.1 and 3.2 below.

Table 3.1
Participation v1.5 Rubric

Score Point	Definition
3	Responds correctly with no teacher assistance
2	Responds correctly after teacher provides verbal/physical cues
1	Responds correctly after teacher provides physical assistance and/or modeling, short of hand-over-hand assistance
Condition Code or Zero Score Points**	**Definition**
A	Incorrect Response
B	Resists/Refuses to participate
C	Teacher provides hand-over-hand assistance

****** All condition codes result in no points.

Table 3.2
Supported Independence v1.5 Rubric

Score Point	Definition
2	Responds correctly with no teacher assistance
1	Responds correctly after teacher provides verbal/physical cues
Condition Code or Zero Score Points**	**Definition**
A	Incorrect Response
B	Resists/Refuses to participate
C	Teacher provides hand-over-hand assistance

** All condition codes result in no points.

3.5 Reporting and Score Use

Several reports are generated that provide specific results of students and summaries of results across classrooms, schools, districts, and the state. These reports are presented in the *Spring 2007 Participation and Supported Independence v1.5 Handbook Addendum*. In addition, school, district, and state results are provided on the MI-Access Information Center. To maintain student anonymity, certain reports are not provided for units with fewer than ten students within a given grade. The following types of reports are provided at each level as presented in Table 3.1. Samples of each report are provided in the Handbook Addendum.

Table 3.3
MI-Access Participation and Supported Independence v1.5 Reports by Level of Reporting

	State Results	District	School	Class
Summary Reports	X	X	X	
Demographic Reports	X	X	X	
Item Analysis Reports	X	X	X	
Rosters		X	X	X
Individual Student Reports				X
Parent Reports			X	

3.6 Available Training and MI-Access Administrative Support

There are several resources and supporting materials for MI-Access.[6]

Each year, the MDE publishes a *MI-Access Coordinator and Assessment Administrator Manual* that provides general information about MI-Access as well as instructions for District and School MI-Access coordinators and assessment administrators.

Each fall and spring assessment window, the MDE delivers a Web cast to update the field on assessment administration procedures and other important MI-Access related issues.

The MDE also publishes a newsletter called *The Assist: Helping to Improve Access to and Progress in the General Curriculum*. The newsletter provides updates regarding MI-Access implementation and administration, as well as MI-Access-related activities from around the state. Each issue also provides stories about special activities related to assessment and the uses of assessment information for planning educational programs for students and training programs for teachers.

The MI-Access contractor also staffs a hotline to which the field can direct questions and concerns regarding the assessments via email or phone.

Finally, the MDE has created various online learning tools to assist the field with MI-Access administration.

[6] Standard 6.9. Test documents should cite a representative set of the available studies pertaining to general and specific uses of the test.

CHAPTER 4

STANDARD SETTING

4.1 Background

Standard setting is an essential component in the design of a statewide assessment program, which is part of a broader educational accountability system. Accountability systems hold educational programs accountable for increasing the number of students whose test scores meet or exceed prescribed standards.

The Michigan Curriculum Framework was used as the basis for content standards relevant for students at the Participation and Supported Independence v1.5 levels. The Michigan Curriculum Framework's model content standards, benchmarks, and grade level content expectations (GLCEs) were reviewed for appropriateness for the Participation and Supported Independence v1.5 populations. In addition, benchmarks and GLCEs were modified or extended when possible with respect to the accessibility or enabling skills needed to achieve the content standard. The complete process is described in the *MI-Access Participation and Supported Independence v1.5 Assessment Plan (MDE, 2007)*.

The performance standards describe what constitutes satisfactory performance of the content standards. These are typically described as the cut scores or decision rules that identify how well students must perform on the assessments to be considered proficient. The Technical Advisory Committee (TAC) considered several models of standard setting before recommending the final model. They also considered numerous aspects of the MI-Access model that would need to be included in the decision-making framework for the standard setting process to be consistent with the intent of the MI-Access and provide a parallel system of standards to the MEAP.

The complete standard setting report can be found in Appendix 1.

CHAPTER 5

RELIABILITY EVIDENCE

5.1 Background

The reliability of scores refers to the consistency or degree of stability of scores under conditions where the measurement is repeated on a population of individuals. "The usefulness of behavioral measurements presupposes that individuals and groups exhibit some degree of stability in their behavior" (AERA, APA, NCME, 1999, p. 25). Variability in scores over successive measurements that is unrelated to the intended measurement is called measurement error. The *Standards* also state "because of subjectivity in the scoring process, an individual's obtained score and the average score of a group will always reflect at least a small amount of measurement error" (AERA, APA, NCME, 1999, p. 25).

The *Standards* clarify the summary requirements for reliability data, critical information that should include the identification of the major sources of error, summary statistics describing the size of resulting errors, the degree of generalizability of scores across relevant aspects of the assessment procedure, and a description of the population on which the reliability evidence is based. It is important to note that reliability data is typically sample-specific, so comparisons to other populations must be tempered by evaluation of the degree of similarity in relevant characteristics between the population and the sample.[7]

5.2 Internal Consistency and Standard Errors of Measurement of Fall 2006 Pilot Forms

Internal consistency estimates were computed as coefficient alpha for each pilot form in ELA and mathematics. Coefficient Alpha and the Standard Error of Estimate (SEM) are reported in Table 5.1 for Participation v1.5 and in Table 5.2 for Supported Independence v1.5. The N, mean, standard deviation and minimum and maximum are also reported in these tables The ELA results are given in the top half of the table and the Mathematics results are given in the bottom half of each table.

[7] Standard 2.1 For each total score, subscore, or combination of scores that is to be interpreted, estimates of relevant reliabilities and standard errors of measurement or test information functions should be reported.

Table 5.1

ELA & Mathematics Fall 2006 Pilot Form Summaries, including Score Statistics, Sample Size, Coefficient Alpha, and SEM by Form—Participation v1.5

TEST FORM	Grade	Mean	SD	Minimum	Maximum	N	Alpha	SEM
PPe-1	3	16.29	10.71	0	34	89	.79	4.9
PPe-2	3	14.17	11.42	0	36	78	.85	4.4
PPe-3	3	17.97	11.45	0	36	91	.85	4.4
PPe-1	4	14.86	10.22	0	36	81	.81	4.5
PPe-2	4	14.17	11.01	0	33	69	.88	3.8
PPe-3	4	14.45	10.82	0	36	80	.86	4.0
PPe-1	5	12.03	10.64	0	36	78	.83	4.4
PPe-2	5	13.51	11.89	0	36	75	.89	3.9
PPe-3	5	14.30	9.90	0	36	105	.80	4.4
PPm-1	6	13.60	10.28	0	36	86	.81	4.5
PPm-2	6	11.96	9.73	0	35	95	.79	4.5
PPm-3	6	14.49	10.80	0	36	59	.85	4.2
PPm-1	7	11.59	10.17	0	36	63	.83	4.2
PPm-2	7	14.12	10.03	0	36	104	.81	4.4
PPm-3	7	14.32	10.71	0	36	73	.83	4.4
PPm-1	8	16.07	11.84	0	36	70	.89	3.9
PPm-2	8	13.15	10.34	0	35	84	.81	4.5
PPm-3	8	16.12	11.41	0	36	75	.86	4.3
PPh-1	11	15.34	10.97	0	34	77	.84	4.4
PPh-2	11	14.37	9.96	0	36	71	.80	4.5
PPh-3	11	16.14	10.94	0	36	57	.86	4.1
TEST FORM	**Grade**	**Mean**	**SD**	**Minimum**	**Maximum**	**N**	**Alpha**	**SEM**
PPe-1	3	17.44	11.15	0	36	89	.83	4.6
PPe-2	3	16.60	12.10	0	36	78	.88	4.2
PPe-3	3	16.26	11.84	0	36	91	.90	3.7
PPe-1	4	16.15	10.67	0	36	81	.83	4.4
PPe-2	4	15.33	10.79	0	36	69	.82	4.6
PPe-3	4	13.35	11.29	0	33	80	.92	3.2
PPe-1	5	13.88	11.81	0	36	78	.87	4.3
PPe-2	5	14.21	12.97	0	36	75	.93	3.4
PPe-3	5	14.12	11.16	0	36	105	.89	3.7
PPm-1	6	12.97	10.80	0	36	86	.85	4.2
PPm-2	6	14.08	10.29	0	36	95	.84	4.1
PPm-3	6	16.14	12.87	0	36	59	.92	3.6
PPm-1	7	11.43	11.14	0	35	63	.84	4.5
PPm-2	7	15.09	11.32	0	36	104	.86	4.2
PPm-3	7	17.45	12.20	0	36	73	.87	4.4
PPm-1	8	17.14	12.10	0	36	70	.88	4.2
PPm-2	8	14.57	10.55	0	36	84	.81	4.6
PPm-3	8	18.68	13.11	0	36	75	.92	3.7
PPh-1	11	17.35	11.63	0	36	77	.86	4.4
PPh-2	11	15.58	11.35	0	36	71	.87	4.1
PPh-3	11	18.02	11.98	0	36	57	.89	4.0

[1]Note- ELA results are given in the top half and the mathematics results are given in the bottom.

Table 5.2

ELA & Mathematics Fall 2006 Pilot Form Summaries, including Score Statistics, Sample Size, Coefficient Alpha, and SEM by Form—Supported Independence v1.5

TEST FORM	Grade	Mean	SD	Minimum	Maximum	N	Alpha	SEM
PSIe-1	3	17.86	7.08	0	28	139	.77	3.4
PSIe-2	3	16.78	7.70	0	28	146	.82	3.3
PSIe-3	3	16.93	7.59	0	28	168	.81	3.3
PSIe-1	4	18.97	6.80	2	28	115	.77	3.3
PSIe-2	4	17.97	6.54	0	28	149	.71	3.5
PSIe-3	4	17.94	7.13	0	28	139	.77	3.4
PSIe-1	5	20.20	6.40	2	28	138	.74	3.3
PSIe-2	5	19.24	6.62	0	28	129	.74	3.4
PSIe-3	5	17.85	7.66	0	28	153	.80	3.4
PSIm-1	6	15.69	7.06	0	28	137	.75	3.5
PSIm-2	6	15.06	6.83	2	28	108	.78	3.2
PSIm-3	6	15.99	6.88	0	28	155	.76	3.4
PSIm-1	7	17.01	6.86	0	28	143	.75	3.4
PSIm-2	7	16.82	6.68	0	28	148	.75	3.3
PSIm-3	7	14.85	8.29	0	28	170	.85	3.2
PSIm-1	8	17.86	7.12	2	28	189	.77	3.4
PSIm-2	8	17.04	7.06	0	28	134	.77	3.4
PSIm-3	8	15.65	7.42	0	28	192	.81	3.2
PSIh-1	11	19.14	6.51	0	28	139	.79	3.0
PSIh-2	11	18.67	6.62	2	28	123	.79	3.0
PSIh-3	11	17.22	7.89	0	28	163	.87	2.8
TEST FORM	Grade	Mean	SD	Minimum	Maximum	N	Alpha	SEM
PSIe-1	3	16.34	7.10	0	28	139	.78	3.3
PSIe-2	3	13.71	8.54	0	28	146	.85	3.3
PSIe-3	3	15.73	7.87	0	28	168	.83	3.2
PSIe-1	4	17.32	7.53	0	28	115	.83	3.1
PSIe-2	4	15.02	8.03	0	28	149	.80	3.6
PSIe-3	4	17.17	7.47	0	28	139	.81	3.3
PSIe-1	5	17.96	6.86	0	28	138	.79	3.1
PSIe-2	5	15.96	7.75	0	28	129	.80	3.5
PSIe-3	5	16.14	8.53	0	28	153	.87	3.1
PSIm-1	6	15.88	6.91	0	28	137	.78	3.2
PSIm-2	6	13.62	7.50	0	28	108	.82	3.2
PSIm-3	6	14.81	7.84	0	28	155	.85	3.0
PSIm-1	7	17.15	7.24	0	28	143	.79	3.3
PSIm-2	7	14.75	7.27	0	28	148	.80	3.3
PSIm-3	7	14.25	7.67	0	28	170	.84	3.1
PSIm-1	8	18.05	7.59	0	28	189	.83	3.1
PSIm-2	8	16.65	7.42	0	28	134	.81	3.2
PSIm-3	8	15.09	7.74	0	28	192	.84	3.1
PSIh-1	11	18.12	7.22	0	28	139	.84	2.9
PSIh-2	11	18.20	7.26	2	28	123	.82	3.1
PSIh-3	11	16.82	7.49	0	28	163	.84	3.0

[1]Note- ELA results are given in the top half and the mathematics results are given in the bottom.

5.3 Internal Consistency and Standard Errors of Measurement of Spring 2007 Operational Assessments

Internal consistency estimates were computed as coefficient alpha for the operational forms in ELA and mathematics. These are reported in Tables 5.3 to 5.6. Across all grades for both content areas of Participation v1.5, the reliabilities are above .90. With one exception, across all grades for both content areas of Supported Independence v1.5 the reliabilities are at least .88 and even for grade 4 ELA the reliability is .86. These reliabilities indicate a high degree of internal consistency for all 28 assessments.

The Standard Error of Measurement (SEM) is the complement of reliability and provides a measure of the precision of the scores. For raw scores, it is estimated as the portion of the raw score standard deviation that is measurement error. It allows one to compute a confidence interval with respect to the precision of the raw score. The SEMs for each assessment are also reported in Tables 5.3 to 5.6 as well as the N, mean, and standard deviation. For both content areas of Supported Independence v1.5, the standard deviations are larger than one might expect from a 60 point test. This is because as much as 3 percent of the students received a valid, earned zero score and from 2 percent to 6 percent of the students obtained a perfect score of 60. The standard deviations are quite large for both content areas of Participation v1.5. The very large standard deviations resulted from the large percentage of students with valid, earned zero scores. Across all grades of both content areas, the percentage of students who received a valid zero score ranged from 13 percent to 22 percent and the percent of students who received a perfect score of 60 ranged from 1 percent to 5 percent. Due to the large standard deviations, especially for the Participation v1.5 assessments, the corresponding SEMs are also large despite the high reliabilities.

Table 5.3
Spring 2007 Operational Form Summaries, including Sample Size, Score Statistics, Coefficient Alpha, and SEM by Grade—ELA Participation v1.5

Grade	N	Mean	SD	Cronbach's Alpha	SEM
3	339	25.32	19.15	.92	5.4
4	265	24.30	18.68	.91	5.6
5	304	24.52	18.56	.91	5.6
6	285	22.09	19.15	.93	5.1
7	274	22.89	18.22	.91	5.5
8	301	25.33	19.36	.92	5.5
11	271	22.74	19.11	.92	5.4

Note: Students could score a total of 60 points.

Table 5.4

Spring 2007 Operational Form Summaries, including Sample Size, Score Statistics, Coefficient Alpha, and SEM by Grade—Mathematics Participation v1.5

Grade	N	Mean	SD	Cronbach's Alpha	SEM
3	339	27.66	19.16	.91	5.7
4	263	25.86	18.97	.91	5.7
5	303	24.53	19.33	.91	5.8
6	285	24.27	20.33	.93	5.4
7	274	24.77	19.17	.91	5.8
8	300	27.70	20.87	.93	5.5
11	271	25.73	20.92	.93	5.5

Note: Students could score a total of 60 points.

Table 5.5

Spring 2007 Operational Form Summaries, including Sample Size, Score Statistics, Coefficient Alpha, and SEM by Grade—ELA Supported Independence v1.5

Grade	N	Mean	SD	Cronbach's Alpha	SEM
3	488	40.07	13.97	.88	4.8
4	487	41.26	13.06	.86	4.9
5	482	41.36	13.73	.88	4.8
6	514	36.35	15.23	.90	4.8
7	593	37.67	14.49	.89	4.8
8	602	37.50	14.61	.89	4.8
11	643	39.15	14.11	.89	4.7

Note: Students could score a total of 60 points.

Table 5.6
Spring 2007 Operational Form Summaries, including Sample Size, Score Statistics, Coefficient Alpha, and SEM by Grade—Mathematics Supported Independence v1.5

Grade	N	Mean	SD	Cronbach's Alpha	SEM
3	488	36.97	15.41	.90	4.9
4	482	37.87	14.96	.89	5.0
5	482	39.28	15.60	.91	4.7
6	514	31.62	16.21	.91	4.9
7	592	32.91	15.63	.90	4.9
8	602	33.23	16.17	.91	4.9
11	640	37.20	14.80	.89	4.9

Note: Students could score a total of 60 points.

5.4 Rater Consistency

Each item of the ELA assessment and the Mathematics assessment is scored based on a rubric. There is a 3 point rubric with 3 condition codes at the Participation v1.5 level and a 2 point rubric with the same 3 condition codes at the Supported Independence v1.5 level. (See Tables 3.1 and 3.2 for the two rubrics.) Each activity has two raters—Primary Assessment Administrator (PAA) and the Shadow Assessment Administrator (SAA). A student's score is the sum of the item scores across both raters. The Primary rater must be a professional school staff person (i.e. classroom teacher, teacher consultant, school psychologist) and is often the classroom teacher. The Shadow rater can be another teacher, related service provider (i.e. school psychologist, speech and language pathologist), or a paraprofessional.

Table 5.7 shows the scores given to the 77 students by the PAA and the SAA for the first item on the grade 11 ELA test for Participation v1.5. While this frequency distribution provides useful information about the performance of these 77 students on this item, additional information is needed to assess the reliability of the raters. To do this, concordance tables were developed for each item at each grade and form for all four assessments of the Fall 2006 Pilot. Table 5.8 is an example of a concordance table for the same first item on the grade 11 ELA Participation v1.5 assessment. This table shows for the 77 students who took this item the percent who received the combination of scores by the PAA (column) and SAA (row). Percents in the shaded cells along the diagonal indicate perfect agreement between the two raters. For example, in the upper left shaded cell, 10.4% of the 77 students received a score of 3 by both raters. Following along the shaded cells in the diagonal, 14.3% received a score of 2 by both raters and 11.7% received a score of 1 by both raters. For the condition codes, 26.0 percent received A by both raters, 6.5 percent received B by both raters, and 22.1 percent received C by both raters. The sum of the percents in all the shaded diagonal cells equals the percent perfect agreement which is 92.6% for this item. Thus, for the first item on the grade 11 ELA Participation v1.5 assessment, the PAA and the SAA agreed on the scores for more than 90 percent of the students. Clearly, there is a high degree of consistency between the scoring of the two raters on this item.

Table 5.7
PAA and SAA Scores for Item 1 of Grade 11 ELA Participation v1.5

Score	Grade 11 (N=77)			
	PAA		SAA	
	#	%	#	%
3	8	10.4	8	10.4
2	12	15.6	12	15.6
1	10	13.0	9	11.7
A	21	27.3	21	27.3
B	7	9.1	7	9.1
C	18	23.4	17	22.1
Multi	1	1.3	1	1.3
Blank	0	0.0	2	2.6

Table 5.8
Percent Agreement Between PAA and SAA for Item 1 of Grade 11 ELA Participation v1.5

PAA Score	% of Students at PAA and SAA score points (N=248)							
	SAA Score							
	3	2	1	A	B	C	Multi	Blank
3	10.4							
2		14.3						1.3
1		1.3	11.7					
A				26.0	1.3			
B				1.3	6.5			1.3
C					1.3	22.1		
Multi							1.3	
Blank								

The consistency of each double-scored item by grade and form in the Fall 2006 pilot is summarized in the following tables:

Table 5.9 Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates- ELA Participation v1.5
Table 5.10 Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates- Mathematics Participation v1.5
Table 5.11 Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates- ELA Supported Independence v1.5
Table 5.12 Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates- Mathematics Supported Independence v1.5

The 126 percent perfect agreement rates for ELA Participation v1.5 ranged from 83% to 99% with a median of 94%. The 126 percent perfect agreement rates for Mathematics Participation v1.5 ranged from 84% to 100% with a median of 95%. The 147 percent perfect agreement rates for ELA Supported Independence v1.5 ranged from 85% to 98% with a median of 94%. The 168 percent perfect agreement rates for Mathematics ranged from 86% to 99% with a median of 95%. Across all 567 items for the four assessments, over 90 percent of the perfect agreement rates were at least 90%. These results were

presented to the Technical Advisory Committee for their review. They remarked that these interrater agreement rates were quite high and concurred that the two raters' scores should be added to obtain the student's item score on future operational forms.

Table 5.9

Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates—ELA Participation v1.5

	Grade 3			Grade 4		
Item Number	PPe-1	PPe-2	PPe-3	PPe-1	PPe-2	PPe-3
	N = 89	N = 78	N = 91	N = 81	N = 69	N = 80
1	93	96	92	88	97	95
2	96	94	96	89	93	93
3	93	91	88	88	93	93
4	96	97	90	94	99	91
5	96	97	95	86	99	94
6	96	95	86	85	96	94
	Grade 5			Grade 6		
Item Number	PPe-1	PPe-2	PPe-3	PPm-1	PPm-2	PPm-3
	N = 78	N = 75	N = 105	N = 86	N = 95	N = 59
1	92	95	90	94	99	92
2	96	96	95	91	94	92
3	97	97	92	94	98	90
4	96	97	94	88	99	92
5	95	92	95	94	94	92
6	96	93	90	92	96	85
	Grade 7			Grade 8		
Item Number	PPm-1	PPm-2	PPm-3	PPm-1	PPm-2	PPm-3
	N = 63	N = 104	N = 73	N = 70	N = 84	N = 75
1	89	93	96	96	89	95
2	94	92	95	93	95	95
3	95	96	92	96	89	91
4	97	98	96	90	88	95
5	98	96	90	91	90	85
6	97	95	89	94	93	92
	Grade 11					
Item Number	PPh-1	PPh-2	PPh-3			
	N = 77	N = 71	N = 57			
1	92	83	89			
2	94	87	96			
3	94	90	95			
4	92	86	93			
5	95	87	95			
6	95	87	91			

Table 5.10
Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates—Mathematics Participation v1.5

	Grade 3			Grade 4		
Item Number	PPe-1	PPe-2	PPe-3	PPe-1	PPe-2	PPe-3
	N = 89	N = 78	N = 91	N = 81	N = 69	N = 80
1	99	96	92	84	96	91
2	98	99	91	86	99	96
3	98	100	90	93	97	95
4	93	100	95	90	96	93
5	97	99	93	89	97	94
6	99	96	92	98	96	94
	Grade 5			Grade 6		
Item Number	PPe-1	PPe-2	PPe-3	PPm-1	PPm-2	PPm-3
	N = 78	N = 75	N = 105	N = 86	N = 95	N = 59
1	94	99	91	95	99	93
2	92	100	95	95	95	92
3	96	100	93	97	97	93
4	97	96	90	94	92	92
5	92	97	96	95	99	92
6	96	93	95	91	97	93
	Grade 7			Grade 8		
Item Number	PPm-1	PPm-2	PPm-3	PPm-1	PPm-2	PPm-3
	N = 63	N = 104	N = 73	N = 70	N = 84	N = 75
1	100	97	95	97	94	95
2	95	92	96	90	92	91
3	98	93	93	94	94	92
4	90	97	97	99	95	91
5	97	99	86	93	88	93
6	94	95	97	100	92	95
	Grade 11					
Item Number	PPh-1	PPh-2	PPh-3			
	N = 77	N = 71	N = 57			
1	96	86	89			
2	92	87	88			
3	94	87	93			
4	94	89	95			
5	92	90	95			
6	91	86	96			

Table 5.11
Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates—
ELA Supported Independence v1.5

	Grade 3			Grade 4		
Item Number	PSIe-1	PSIe-2	PSIe-3	PSIe-1	PSIe-2	PSIe-3
	N = 139	N = 146	N = 168	N = 115	N = 149	N = 139
1	94	98	95	91	95	96
2	97	96	97	90	95	98
3	97	94	95	96	97	98
4	95	96	95	95	96	96
5	96	92	93	90	95	96
6	97	94	93	91	94	94
7	95	96	94	91	98	93
	Grade 5			Grade 6		
Item Number	PSIe-1	PSIe-2	PSIe-3	PSIm-1	PSIm-2	PSIm-3
	N = 138	N = 129	N = 153	N = 137	N = 108	N = 155
1	93	95	95	97	90	94
2	93	93	97	93	92	93
3	97	96	98	96	92	92
4	94	97	96	95	97	97
5	93	95	95	93	90	91
6	97	95	96	90	96	89
7	96	93	96	96	90	89
	Grade 7			Grade 8		
Item Number	PSIm-1	PSIm-2	PSIm-3	PSIm-1	PSIm-2	PSIm-3
	N = 143	N = 148	N = 170	N = 189	N = 134	N = 192
1	96	95	92	94	94	86
2	92	92	93	89	89	85
3	94	94	97	96	97	93
4	92	95	93	96	92	91
5	90	91	95	95	94	93
6	87	93	93	96	98	92
7	95	92	89	95	95	87
	Grade 11					
Item Number	PSIh-1	PSIh-2	PSIh-3			
	N = 139	N = 123	N = 163			
1	97	92	91			
2	97	90	93			
3	96	87	94			
4	96	92	94			
5	97	89	94			
6	97	89	92			
7	93	90	94			

Table 5.12
Fall 2006 Pilot Form Percent Perfect Interrater Agreement Rates—
Mathematics Supported Independence v1.5

	Grade 3			Grade 4		
Item Number	PSIe-1	PSIe-2	PSIe-3	PSIe-1	PSIe-2	PSIe-3
	N = 139	N = 146	N = 168	N = 115	N = 149	N = 139
1	95	97	94	91	98	93
2	95	97	91	91	97	95
3	96	97	95	94	95	97
4	94	94	92	93	99	96
5	97	97	96	92	97	97
6	97	97	94	95	96	96
7	97	94	93	89	97	96
8	96	94	96	93	99	96
	Grade 5			Grade 6		
Item Number	PSIe-1	PSIe-2	PSIe-3	PSIm-1	PSIm-2	PSIm-3
	N = 138	N = 129	N = 153	N = 137	N = 108	N = 155
1	96	95	96	96	90	89
2	93	95	93	93	97	95
3	90	94	97	93	96	96
4	93	97	93	93	92	91
5	95	94	94	93	96	95
6	93	97	97	96	87	95
7	92	95	95	93	93	97
8	95	95	96	95	93	92
	Grade 7			Grade 8		
Item Number	PSIm-1	PSIm-2	PSIm-3	PSIm-1	PSIm-2	PSIm-3
	N = 143	N = 148	N = 170	N = 189	N = 134	N = 192
1	95	92	89	95	95	87
2	94	91	95	97	93	93
3	92	92	95	97	91	92
4	92	92	95	94	93	94
5	92	95	93	96	95	95
6	92	93	93	97	94	92
7	92	95	95	92	97	90
8	96	95	97	97	94	87
	Grade 11					
Item Number	PSIh-1	PSIh-2	PSIh-3			
	N = 139	N = 123	N = 163			
1	93	90	94			
2	96	91	95			
3	94	93	93			
4	96	89	95			
5	98	89	97			
6	95	86	96			
7	95	94	98			
8	93	92	97			

The consistency of each double-scored item in the Spring 2007 operational forms is summarized in the following tables:

Table 5.13 Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates- ELA Participation v1.5
Table 5.14 Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates- Mathematics Participation v1.5
Table 5.15 Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates- ELA Supported Independence v1.5
Table 5.16 Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates- Mathematics Supported Independence v1.5

Across all 350 items for the four assessments, the percent perfect agreement rates ranged from 92% to 99% with a median of 96%. The percent perfect agreement rates are somewhat higher for the Spring 2007 operational forms versus the Fall 2006 pilot forms. The median for the operational forms is 96% versus the median of 94.5% for the pilot forms. More importantly, the lowest percent for the operational forms is 92% whereas, almost 10 percent of the agreement rates were less than 90% for the pilot although typically in the high 80%s. This may be because stakes were not attached to the Fall 2006 pilot testing whereas Spring 2007 was operational with stakes attached to students, schools, and districts. It may be some of the raters in the pilot were not as motivated as the vast majority in the pilot and those in the operational testing.

Table 5.13
Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates—ELA Participation v1.5

Item Number	Grade 3 N = 339	Grade 4 N = 265	Grade 5 N = 304	Grade 6 N = 285
1	97	96	95	95
2	95	94	95	95
3	96	95	95	96
4	96	93	95	98
5	96	94	94	96
6	96	95	95	96
7	94	95	93	96
8	97	94	94	96
9	94	94	96	96
10	96	95	92	96

Item Number	Grade 7 N = 274	Grade 8 N = 301	Grade 11 N = 271
1	96	96	93
2	97	95	95
3	97	93	97
4	96	96	96
5	97	95	93
6	96	94	93
7	97	96	96
8	96	94	94
9	96	97	96
10	96	97	97

Table 5.14
Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates—Mathematics Participation v1.5

Item Number	Grade 3 N = 339	Grade 4 N = 263	Grade 5 N = 303	Grade 6 N = 285
1	96	94	97	95
2	96	98	96	96
3	96	95	94	97
4	96	94	96	98
5	96	94	95	96
6	97	94	97	97
7	95	96	95	98
8	98	95	97	98
9	95	95	96	98
10	96	97	96	96

Item Number	Grade 7 N = 274	Grade 8 N = 300	Grade 11 N = 271
1	95	96	99
2	99	97	94
3	96	97	95
4	97	97	96
5	97	96	96
6	97	97	97
7	97	98	97
8	98	97	97
9	97	97	95
10	99	95	96

Table 5.15
Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates—ELA Supported Independence v1.5

Item Number	Grade 3 N = 488	Grade 4 N = 487	Grade 5 N = 482	Grade 6 N = 514
1	98	98	98	96
2	97	97	98	96
3	96	95	98	97
4	97	95	97	98
5	96	96	96	97
6	96	95	96	97
7	95	94	95	95
8	98	96	95	95
9	95	96	96	95
10	96	96	96	96
11	94	97	96	97
12	96	97	97	96
13	95	98	96	96
14	97	96	96	97
15	95	95	97	96

Item Number	Grade 7 N = 593	Grade 8 N = 602	Grade 11 N = 643
1	95	96	96
2	95	96	96
3	96	97	94
4	98	98	93
5	95	97	93
6	94	95	93
7	96	97	96
8	94	96	94
9	95	95	95
10	98	97	96
11	95	96	95
12	96	96	94
13	95	96	95
14	97	96	94
15	95	96	95

Table 5.16
Spring 2007 Operational Form Percent Perfect Interrater Agreement Rates—Mathematics Supported Independence v1.5

Item Number	Grade 3 N = 488	Grade 4 N = 482	Grade 5 N = 482	Grade 6 N = 514
1	96	95	98	97
2	96	96	96	96
3	97	97	96	97
4	97	98	97	97
5	96	95	96	96
6	97	96	97	96
7	96	98	97	96
8	96	96	96	97
9	97	97	97	98
10	96	96	97	97
11	95	97	96	96
12	96	97	99	96
13	97	96	96	97
14	97	96	97	98
15	97	97	97	97

Item Number	Grade 7 N = 592	Grade 8 N = 602	Grade 11 N = 640
1	96	95	96
2	95	97	95
3	97	97	95
4	95	96	95
5	97	96	95
6	95	96	95
7	96	96	96
8	97	97	94
9	97	96	95
10	97	96	97
11	97	97	95
12	96	98	95
13	96	96	95
14	97	98	95
15	95	97	96

CHAPTER 6

VALIDITY EVIDENCE

6.1 Background

Validity is the most important consideration for the development and evaluation of an assessment. "Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests" (AERA, APA, NCME, 1999, p. 9). Validation begins with a clarification of the appropriate interpretations of scores. The evidence that is gathered to support such interpretations should be linked to proposed uses of the scores that result from the assessment.

Related to this is construct-irrelevant variance or variance in scores that is introduced systematically by influences not related to the characteristic being measured. "Validation involves careful attention to possible distortions in meaning arising from inadequate representation of the construct and also to aspects of measurement such as test format, administration conditions, or language level that may materially limit or qualify the interpretation of test scores" (AERA, APA, NCME, 1999, p. 10).

In addition to the evidence presented below, the documentation of the development of MI-Access provided in Chapters 1 and 2 provides additional evidence regarding the meaning and usefulness of the assessment results while Chapter 3 presents training and resources available to improve the observation and rating process.

6.2 Relevance of Content (Test Blueprint)

The heart of MI-Access is embodied in the set of EGLCEs for elementary and middle school and the EHSCEs for high school along with the corresponding Scoring Focus for each assessment item. These documents lead to the subject matter areas typically found in standard assessments; namely ELA and mathematics. The current set of EGLCEs and EHSCEs and corresponding Scoring Foci were developed through an inclusive process, involving teachers, school administrators, parents, advocates, and adult service agency personnel. This process has been documented in Chapters 1 and 2 and provides clear evidence of the general agreement from key stakeholders and experts regarding their appropriateness, comprehensiveness, and completeness.

6.3 Field Review of the MI-Access Participation and Supported Independence v1.5 Assessment Plan

Once the draft of the MI-Access Participation and Supported Independence v1.5 Assessment Plan was completed, an online evaluation form was provided for feedback from the field. The results of this feedback were considered in the development of the final assessment plan as implemented.

6.4 Results of Item Review Processes

Fall 2006 Pilot

Following the Fall 2006 Pilot, Content Advisory Committees (CAC) and Sensitivity Review Committees (SRC) were convened to review items and resulting statistics. The following questions were addressed during the CAC review:

1. Does the item measure the content standard?
2. Does the item measure the extended GLCE/Benchmark?
3. Is the item simply and clearly stated?
4. Does the item measure a functional and familiar word?
5. Is the item difficulty appropriate?
6. Is the artwork appropriate?
7. Does the item meet the specifications?

This review identified about 5% of items for deletion and about 17% for revision.

6.5 Evaluation of Standard-Setting Training, Process, and Outcomes

Since, perhaps, the main interpretation of scores from these four assessments relies on the cut scores obtained from the standard setting, then an evaluation of the process provides some, albeit indirect, evidence of the validity of the score interpretation. Such an evaluation does not provide sufficient information, but it does provide necessary information. Participants were instructed to "Please share with us your feedback about the standards-setting process, activities and outcomes. Your feedback will help OEAA evaluate the training, methods, materials, and results of the sessions." These results were pooled across the standard setting panels and summarized in Figure 6.1. These data provide an indication of the stability of panelists' judgments across rounds of ratings. Across sessions, panelists generally rated all aspects of the sessions highly. They felt that the major activities of the sessions were covered successfully, considered many pertinent elements in making their recommendations, showed increased understanding of the task across rounds of ratings, well understood the data provided to them, and were confident in their judgments by the end of the session.

Figure 6.1
Panelist Evaluations
MI-Access Participation and Supported Independence v1.5 Standard Setting Process

Number of Panelists = 57
Number of Evaluations Submitted = 55

Indicate the level of success of various components of the standard-setting session in which you participated:

Component	Not Very Successful	Partially Successful	Successful	Very Successful
Introduction to the *MI-Access* Assessment	0%	3%	45%	47%
Standard-setting process intro. – Large group	7%	16%	40%	36%
Performance Level Descriptor review	5%	20%	49%	25%
Standard-setting orientation – Small group	5%	18%	41%	32%
Group discussions of the panel	3%	18%	40%	34%
Data presentations before Rounds 2 & 3	1%	7%	43%	38%

Indicate the importance of each of these factors in making your cut-score recommendations.

Component	Not Very Successful	Partially Successful	Successful	Very Successful
Performance Level Descriptors	3%	14%	43%	34%
Your perception of the assessment's difficulty	1%	9%	52%	32%
Your own professional experiences	1%	9%	34%	52%
Your initial judgments (Round 1)	5%	32%	38%	20%
Group discussions of the panel	1%	7%	43%	43%
Feedback data provided to the panel	0%	3%	38%	52%
Policy environment in the state	5%	29%	38%	16%
What students would *vs.* should be able to do	5%	9%	50%	34%

I understood the task of recommending performance standards when I did my work for:

	Not Very Well	Moderately Well	Very Well
Round 1	30%	49%	18%
Round 2	1%	38%	58%
Round 3	1%	7%	83%

I understood the data that were provided to the panel prior to:

	Not Very Well	Moderately Well	Very Well
Round 1	3%	38%	52%
Round 2	1%	18%	78%

How confident are you with your *personal* classification of students at each level of proficiency?

Performance Level	Not Confident	Somewhat Confident	Confident	Very Confident
Surpassed the Performance Standard	0%	10%	47%	34%
Attained the Performance Standard	0%	10%	54%	27%
Emerging Towards the Performance Standard	0%	10%	50%	32%

6.6 Interrelations Among Tests (subtest observed scores)

Intercorrelations within tests provide a picture of the internal structure of a test, indicating the extent to which item types and items within subsections of the content area "hang together." To some extent, these correlations should be relatively high, indicating a set of items that contribute to a common measure. However, smaller correlations are common when item types differ significantly. It is common to see multiple-choice scores weakly correlated with essay scores or other constructed-response tasks that differ significantly from the multiple-choice format. However, there is no issue of item type for the four assessments described in this report. The same item type is used for both ELA and Mathematics Participation v1.5 (3 point rubric plus 3 condition codes) and the same item type is used for both ELA and Mathematics Supported Independence v1.5 (2 point rubric plus 3 condition codes). Reported here will be the intercorrelations between the items from different subcontent areas. Moreover, when these intercorrelation structures are consistent across grades, it provides additional support for the similarity of test construction across grades as well.

In the tables below, several interrelations within tests are explored for the Spring 2007 operational forms. The correlation between Accessing Information and Expressing Ideas is given by grade for ELA Participation v1.5 in Table 6.1 and these correlations ranged from .70 to .81. Within Accessing Information, the correlation between Word Study and Comprehension is given by grade for ELA Participation v1.5 in Table 6.2 and these correlations ranged from .72 to .80. For ELA Supported Independence v1.5, the correlation between Accessing Information and Expressing Ideas is given by grade in Table 6.3 and these correlations ranged from .70 to .75. Within Accessing Information, the correlation between Word Study and Comprehension for Supported Independence v1.5 is given by grade in Table 6.4 and these correlations ranged from .55 to .67. For each level, the correlations are uniformly high in both content areas indicating a high degree of association between the subcontent areas. For each content area within each level, the correlational structure is generally consistent across the grades. The correlations between Word Study and Comprehension are lower for Supported Independence v1.5 than Participation v1.5 due to the Comprehension scores being generally a little more skewed for Supported Independence v1.5 than Participation v1.5.

Table 6.1
Spring 2007 Operational Form Correlations Between Accessing Information and Expressing Ideas—ELA Participation v1.5

Grade	N	Pearson Correlation
3	339	0.738
4	265	0.748
5	304	0.702
6	285	0.809
7	274	0.755
8	301	0.790
11	271	0.808

Table 6.2
Spring 2007 Operational Form Correlations Between Word Study and Text Comprehension—ELA Participation v1.5

Grade	N	Pearson Correlation
3	339	0.717
4	265	0.718
5	304	0.737
6	285	0.796
7	274	0.750
8	301	0.760
11	271	0.681

Table 6.3
Spring 2007 Operational Form Correlations Between Accessing Information and Expressing Ideas—ELA Supported Independence v1.5

Grade	N	Pearson Correlation
3	488	0.723
4	487	0.701
5	482	0.740
6	514	0.752
7	593	0.745
8	602	0.746
11	643	0.735

Table 6.4
Spring 2007 Operational Form Correlations Between Word Study and Text Comprehension—ELA Supported Independence v1.5

Grade	N	Pearson Correlation
3	488	0.602
4	487	0.547
5	482	0.569
6	514	0.667
7	593	0.636
8	602	0.621
11	643	0.617

Complete intercorrelation matrices between the Mathematics subsection scores by grade are given in Table 6.5 for Participation v1.5 and in Table 6.6 for Supported Independence v1.5. For Participation v1.5, the intercorrelations generally ranged from the low .60s to the mid .70s. For grade 3 the intercorrelations were somewhat smaller and for grades 8 and 11, the intercorrelations were somewhat higher. The lowest correlations were for Data Probability and Measurement, the two subsections with the fewest possible score points, only 6 for Data Probability and 12 for Measurement. Grades 3, 4, and 5 for Supported Independence v1.5 contain the same four subsections as Participation v1.5 and the intercorrelations are similar to those for Participation v1.5. For grades 6, 7, 8, and 11 of Supported Independence v1.5, there is also an Algebra subsection. Since the maximum possible score is 60 at all grades, there are fewer possible score points on all subsections due to the introduction of Algebra at these grades. The intercorrelations between the five subsections in these four grades generally ranged from .50 to.70. The lowest correlations are between Data Probability and Algebra, the two subsections with the fewest possible score points, only 8 on each. The correlational structure for grades 3, 4, and 5 with four subsections is consistent. Likewise, the correlational structure for grades 6, 7, 8, and 11 with five subsections is consistent.

Finally, the Ns, means, and standard deviations along with the minimum and maximum score for subsections by grade are also provided. These summary statistics are given in Table 6.7 for ELA Participation v1.5, in Table 6.8 for ELA Supported Independence v1.5, in Table 6.9 for Mathematics Participation v1.5, and in Table 6.10 for Mathematics Supported Independence v1.5.

Table 6.5

Spring 2007 Operational Form Intercorrelations Between Section Scores by Grade—Mathematics Participation v1.5

Grade		Data Probability	Geometry	Measure-ment	Numbers and Operations
3	Data Probability	1	.599	.500	.506
	Geometry	.599	1	.693	.708
	Measurement	.500	.693	1	.735
	Numbers and Operations	.506	.708	.735	1
	N	339	339	339	339
4	Data Probability	1	.641	.610	.602
	Geometry	.641	1	.655	.747
	Measurement	.610	.655	1	.722
	Numbers and Operations	.602	.747	.722	1
	N	263	263	263	263
5	Data Probability	1	.715	.607	.620
	Geometry	.715	1	.684	.753
	Measurement	.607	.684	1	.686
	Numbers and Operations	.620	.753	.686	1
	N	303	303	303	303
6	Data Probability	1	.671	.639	.591
	Geometry	.671	1	.809	.738
	Measurement	.639	.809	1	.777
	Numbers and Operations	.591	.738	.777	1
	N	285	285	285	285
7	Data Probability	1	.605	.591	.519
	Geometry	.605	1	.700	.726
	Measurement	.591	.700	1	.665
	Numbers and Operations	.519	.726	.665	1
	N	274	274	274	274
8	Data Probability	1	.718	.665	.592
	Geometry	.718	1	.789	.798
	Measurement	.665	.789	1	.759
	Numbers and Operations	.592	.798	.759	1
	N	300	300	300	300
11	Data Probability	1	.683	.642	.638
	Geometry	.683	1	.826	.782
	Measurement	.642	.826	1	.777
	Numbers and Operations	.638	.782	.777	1
	N	271	271	271	271

Table 6.6

Spring 2007 Operational Form Intercorrelations Between Section Scores by Grade—Mathematics Supported Independence v1.5

Grade		Data Probability	Geometry	Measurement	Numbers and Operations	Algebra
3	Data Probability	1	.562	.571	.465	n/a
	Geometry	.562	1	.750	.672	n/a
	Measurement	.571	.750	1	.719	n/a
	Numbers and Operations	.465	.672	.719	1	n/a
	N	488	488	488	488	n/a
4	Data Probability	1	.571	.599	.582	n/a
	Geometry	.571	1	.715	.638	n/a
	Measurement	.599	.715	1	.685	n/a
	Numbers and Operations	.582	.638	.685	1	n/a
	N	482	482	482	482	n/a
5	Data Probability	1	.619	.660	.591	n/a
	Geometry	.619	1	.719	.678	n/a
	Measurement	.660	.719	1	.721	n/a
	Numbers and Operations	.591	.678	.721	1	n/a
	N	482	482	482	482	n/a
6	Data Probability	1	.652	.611	.616	.484
	Geometry	.652	1	.702	.723	.649
	Measurement	.611	.702	1	.683	.636
	Numbers and Operations	.616	.723	.683	1	.610
	Algebra	.484	.649	.636	.610	1
	N	514	514	514	514	514
7	Data Probability	1	.613	.627	.617	.538
	Geometry	.613	1	.661	.692	.590
	Measurement	.627	.661	1	.705	.632
	Numbers and Operations	.617	.692	.705	1	.586
	Algebra	.538	.590	.632	.586	1
	N	592	592	592	592	592
8	Data Probability	1	.601	.605	.595	.540
	Geometry	.601	1	.682	.697	.643
	Measurement	.605	.682	1	.691	.630
	Numbers and Operations	.595	.697	.691	1	.603
	Algebra	.540	.643	.630	.603	1
	N	602	602	602	602	602

Table 6.6 (Continued)

Spring 2007 Operational Form Intercorrelations Between Section Scores by Grade—Mathematics Supported Independence v1.5

Grade		Data Probability	Geometry	Measurement	Numbers and Operations	Algebra
11	Data Probability	1	.447	.614	.473	.488
	Geometry	.447	1	.625	.604	.552
	Measurement	.614	.635	1	.723	.672
	Numbers and Operations	.473	.604	.723	1	.618
	Algebra	.488	.552	.672	.618	1
	N	640	640	640	640	640

Table 6.7
Spring 2007 Operational Form Summary Statistics for Section Scores by Grade—ELA Participation v1.5

Grade		N	Minimum Score	Maximum Score	Mean	Standard Deviation
3	Accessing Information	33	0	36	14.64	12.51
	Word Study	33	0	18	7.00	7.04
	Comprehension	33	0	18	7.63	6.46
	Expressing Ideas	33	0	24	10.68	7.95
4	Accessing Information	26	0	36	14.09	11.84
	Word Study	26	0	18	6.90	6.77
	Comprehension	26	0	18	7.19	6.00
	Expressing Ideas	26	0	24	10.21	8.10
5	Accessing Information	30	0	36	14.15	12.00
	Word Study	30	0	18	7.02	6.59
	Comprehension	30	0	18	7.13	6.29
	Expressing Ideas	30	0	24	10.36	8.06
6	Accessing Information	28	0	36	11.49	11.75
	Word Study	28	0	18	5.58	6.12
	Comprehension	28	0	18	5.91	6.28
	Expressing Ideas	28	0	24	10.59	8.35
7	Accessing Information	27	0	36	11.37	11.38
	Word Study	27	0	18	5.55	5.99
	Comprehension	27	0	18	5.82	6.18
	Expressing Ideas	27	0	24	11.53	8.02
8	Accessing Information	30	0	36	13.54	12.16
	Word Study	30	0	18	6.61	6.30
	Comprehension	30	0	18	6.93	6.66
	Expressing Ideas	30	0	24	11.78	8.26
11	Accessing Information	27	0	36	12.24	11.64
	Word Study	27	0	18	5.96	6.43
	Comprehension	27	0	18	6.28	6.27
	Expressing Ideas	27	0	24	10.50	8.43

Table 6.8
Spring 2007 Operational Form Summary Statistics for Section Scores by Grade—ELA Supported Independence v1.5

Grade		N	Minimum Score	Maximum Score	Mean	Standard Deviation
3	Accessing Information	48	0	36	24.51	8.78
	Word Study	48	0	16	11.16	4.26
	Comprehension	48	0	20	13.35	5.54
	Expressing Ideas	48	0	24	15.56	6.24
4	Accessing Information	48	0	36	25.11	8.16
	Word Study	48	0	16	11.38	4.28
	Comprehension	48	0	20	13.74	4.99
	Expressing Ideas	48	0	24	16.14	5.97
5	Accessing Information	48	0	36	25.33	8.50
	Word Study	48	0	16	11.67	4.18
	Comprehension	48	0	20	13.66	5.40
	Expressing Ideas	48	0	24	16.03	6.20
6	Accessing Information	51	0	36	21.91	9.75
	Word Study	51	0	16	10.42	4.90
	Comprehension	51	0	20	11.49	5.77
	Expressing Ideas	51	0	24	14.44	6.48
7	Accessing Information	59	0	36	22.75	9.28
	Word Study	59	0	16	11.03	4.69
	Comprehension	59	0	20	11.72	5.56
	Expressing Ideas	59	0	24	14.92	6.20
8	Accessing Information	60	0	36	22.69	9.38
	Word Study	60	0	16	10.99	4.68
	Comprehension	60	0	20	11.70	5.73
	Expressing Ideas	60	0	24	14.82	6.20
11	Accessing Information	64	0	36	22.90	9.32
	Word Study	64	0	16	10.71	4.91
	Comprehension	64	0	20	12.19	5.45
	Expressing Ideas	64	0	24	16.25	5.77

Table 6.9

Spring 2007 Operational Form Summary Statistics for Section Scores by Grade—Mathematics Participation v1.5

Grade		N	Minimum Score	Maximum Score	Mean	Standard Deviation
3	Data and Probability	339	0	6	3.71	2.68
	Geometry	339	0	24	13.32	8.56
	Measurement	339	0	12	4.67	4.74
	Numbers and Operations	339	0	18	5.97	6.04
4	Data and Probability	263	0	6	3.56	2.69
	Geometry	263	0	24	12.22	8.45
	Measurement	263	0	12	4.58	4.69
	Numbers and Operations	263	0	18	5.50	5.73
5	Data and Probability	303	0	6	3.44	2.69
	Geometry	303	0	24	11.63	8.75
	Measurement	303	0	12	4.28	4.56
	Numbers and Operations	303	0	18	5.18	5.77
6	Data and Probability	285	0	6	3.34	2.72
	Geometry	285	0	24	10.78	9.07
	Measurement	285	0	12	4.37	4.80
	Numbers and Operations	285	0	18	5.78	6.00
7	Data and Probability	274	0	6	3.56	2.65
	Geometry	274	0	24	10.93	8.69
	Measurement	274	0	12	4.36	4.57
	Numbers and Operations	274	0	18	5.92	6.06
8	Data and Probability	300	0	6	3.46	2.72
	Geometry	300	0	24	11.94	9.03
	Measurement	300	0	12	5.43	4.93
	Numbers and Operations	300	0	18	6.86	6.32
11	Data and Probability	271	0	6	3.43	2.79
	Geometry	271	0	24	10.62	9.03
	Measurement	271	0	12	5.01	4.95
	Numbers and Operations	271	0	18	6.66	6.25

Table 6.10
Spring 2007 Operational Form Summary Statistics for Section Scores by Grade—Mathematics Supported Independence v1.5

Grade		N	Minimum Score	Maximum Score	Mean	Standard Deviation
3	Data and Probability	488	0	8	5.70	2.40
	Geometry	488	0	16	10.95	4.65
	Measurement	488	0	20	12.01	5.62
	Numbers and Operations	488	0	16	8.31	5.13
	Valid N (listwise)	488				
4	Data and Probability	482	0	8	5.73	2.38
	Geometry	482	0	16	11.16	4.63
	Measurement	482	0	20	12.53	5.56
	Numbers and Operations	482	0	16	8.45	4.78
5	Data and Probability	482	0	8	6.05	2.32
	Geometry	482	0	16	11.52	4.66
	Measurement	482	0	20	12.90	5.69
	Numbers and Operations	482	0	16	8.82	5.13
6	Data and Probability	514	0	8	3.92	2.77
	Geometry	514	0	12	7.50	3.85
	Measurement	514	0	16	7.87	4.34
	Numbers and Operations	514	0	16	7.32	5.35
	Algebra	514	0	8	5.01	2.73
7	Data and Probability	592	0	8	4.12	2.72
	Geometry	592	0	12	7.81	3.57
	Measurement	592	0	16	8.02	4.25
	Numbers and Operations	592	0	16	7.95	5.25
	Algebra	592	0	8	5.00	2.68
8	Data and Probability	602	0	8	4.21	2.72
	Geometry	602	0	12	7.91	3.66
	Measurement	602	0	16	8.19	4.39
	Numbers and Operations	602	0	16	7.92	5.55
	Algebra	602	0	8	5.01	2.75
11	Data and Probability	640	0	8	6.35	2.25
	Geometry	640	0	8	5.12	2.66
	Measurement	640	0	20	11.64	5.36
	Numbers and Operations	640	0	16	8.72	4.88
	Algebra	640	0	8	5.37	2.52

Appendix 1

MI Access™
Michigan's Alternate Assessment Program

Summary Report

Setting Student Performance Standards on the MI-Access Participation & Supported Independence v1.5 English Language Arts and Mathematics Assessments

Grades 3 – 8, and 11

Report by:

Beck Evaluation & Testing Associates, Inc.(Now known as Questar Assessment, Inc.)

MICHIGAN Department of Education

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Background on MI-Access

The MI-Access assessment system is designed for students who are unable to take the regular state assessment, the Michigan Educational Assessment Program (MEAP), even with accommodations. The MI-Access instruments have been developed over a several-year period by the Michigan Department of Education (MDE). Extensive information concerning the development of these instruments can be found in various publications of the MDE issued by the Office of Educational Assessment and Accountability (OEAA), and is available on request.

Two levels of this three-tiered system – Participation and Supported Independence v1.5 – are currently observation-based assessments designed for students with a significant cognitive impairment. These levels both became operational statewide in the spring of 2002; student performance standards were established at that time and were applied to results for the past three testing periods. The third level of the system, Functional Independence, became operational statewide for the first time in the fall of 2005 and is designed for students who have, or function as if they have, a mild cognitive impairment. The content of the Participation and Supported Independence v1.5 assessments was changed in 2006 to explicitly reflect the state's Extended Grade Level Content Expectations and Extended High School Content Expectations for English Language Arts and Mathematics. Since these new assessments were initially administered statewide operationally for the spring 2007 testing period, the OEAA decided, with OEAA National Technical Advisory Committee (TAC) approval, that it was necessary to reestablish the performance standards for these reconstituted (termed P/SI v1.5) assessments. Such standards were established for Grades 3 through 8 and 11 using an OEAA TAC- and OEAA-approved procedure on May 2-3 of 2007, and panel recommendations for standards for these grade levels were approved by the State Board of Education on May 8, 2007. This report summarizes the activities and procedures leading to the establishment of these student performance standards for the MI-Access Participation and Supported Independence v1.5 English Language Arts and Mathematics assessments.

These activities were conducted during 2006 and early 2007, continuing through the conduct of the actual standards-setting panel sessions in May of 2007, in essentially three stages:

- Develop, revise, and finalize an implementation plan
- Collect committee recommendations for the standards
- Review the recommendations and obtain MDE and TAC recommendations and State Board of Education adoption of the standards.

Activities and outcomes of each of these stages are discussed below.

Develop an Implementation Plan

Planning for the standard setting activities began in the winter of 2006-2007 with discussions among professional staff of OEAA and the state's contractor to MDE for MI-Access support services, Questar Assessment, Inc. (formerly BETA/TASA). These discussions led to two iterations of written outlines for the process to be followed for establishing the student performance standards. These draft plans were discussed with the OEAA TAC early in 2007, during which revisions were proposed and the plans ultimately approved. Based on the draft plans and TAC counsel, the implementation process was finalized in March. The TAC-approved version of the implementation plan is available from

OEAA (**Appendix C**). The subsequent implementation of the standard-setting process for all grade levels was carried out consistent with the TAC-approved plan. Essentially identical procedures were followed for the sessions summarized in this report as were carried out for earlier MI-Access standard-setting sessions. Conduct of the P/SI v1.5 sessions and subsequent data analyses and state standards-adoption processes were parallel for all grades and assessment versions.

Collect Committee Recommendations for the Standards

Prior to the standard-setting sessions, the OEAA developed – with input from a range of Michigan stakeholders -- three "achievement labels" and corresponding draft performance-level descriptors (PLDs) to describe student performance on the MI-Access P/SI v1.5 assessments. The three Performance Categories used for each level of MI-Access – *Emerging*, *Attained*, and *Surpassed the Performance Standards* – were used for the P/SI v1.5 assessments; these are the same performance labels as are used on both the earlier versions of these assessments and for the MI-Access Functional Independence English Language Arts and Mathematics assessments. The draft PLDs for each MI-Access level and content area guided the standard-setting panels. During and immediately subsequent to the panel sessions, panelists were asked to review, critique, amplify, edit, and otherwise revise the draft PLDs. The draft PLDs for all grade levels used to guide the panelists' efforts are shown in **Appendix A**. The final PLDs, based on standard setting panel recommended revisions will be used by OEAA in presenting the MI-Access results to various assessment audiences (**Appendix B**).

The primary events that led to the recommended standards were four standard-setting panels that met in East Lansing on May 2 and 3, 2007. Panels were convened to recommend standards for MI-Access, as follows:

- Participation v1.5 – English Language Arts – Grades 3-8, 11
- Participation v1.5 – Mathematics – Grades 3-8, 11
- Supported Independence v1.5 – English Language Arts – Grades 3-8, 11
- Supported Independence v1.5 -- Mathematics – Grades 3-8, 11

Each panel met for two full days and followed essentially identical procedures; the agenda and plan for their meetings are presented in **Appendix C**. Detailed facilitator scripts and corresponding overhead transparencies were used by facilitators for each of the four sessions. To maximize comparability of sessions and resulting recommendations across grades and assessments, identical agendas and overhead transparencies were used for all sessions; the only differences were with regard to the assessments addressed in the sessions. Scripts across the several levels of the assessments were also as comparable as possible. All materials used for the May sessions were essentially identical to those used for the earlier MI-Access standard setting sessions; these had been reviewed by OEAA staff and the TAC prior to their use.

Standard-setting panelists included previous panel members and those that were selected from applications made to the OEAA by school districts and various professional organizations and advocacy groups (See **Appendix D**). Particular attention was paid to include a broad range of stakeholder representation on each panel. Nominations were sought from all MI-Access District Coordinators, from the state's Special Education Advisory Committee, the OEAA Advisory Committee, and from various professional organizations; the call for panelists was also posted on the MI-Access Web page. New participants were selected from the numerous nominations received. Panel members included classroom teachers (both special and general education), building-level administrators, parents,

special education directors, related professional services staff, school counselors and psychologists, parents, and special-education advocacy group representatives. The majority of members of each panel were active, practicing educators. A total of **57** panelists participated in the activities. **Appendix E** contains a list of all participants in the standard-setting activities according to the panel on which they served. Panelists clearly understood that their role was that of an *advisory group* – to recommend a set of performance standards to MDE and the Michigan State Board of Education (SBE). The SBE had the ultimate authority to actually determine or "set" the standards. It was the opinion of all session facilitators that panelists well understood the tasks involved in recommending student performance standards and their role in same; similarly, all panelists in all sessions attended to session instructions and appeared to conduct their work consistent with the tasks assigned.

All standard-setting sessions were facilitated by a member of the contractor's staff who was experienced in moderating standard-setting and other group decision-making sessions (See **Appendix G**). Facilitators all followed the same agenda and used the same overhead transparency sequence and notes to lead their individual sessions. The four concurrent two-day sessions were all organized identically. Peggy Dutcher and her staff from OEAA provided an overview of the MI-Access instruments and their scoring (See **Appendix H**). A Questar Assessment, Inc. facilitator presented a general introduction or overview of the standard-setting process and the three performance labels to be used (See **Appendix I)**. The panelists then broke into separate panels to begin their work; all subsequent sessions were held in the separate-panel forums outlined above. Multiple MDE/OEAA personnel were present for the sessions, but they served only as resource personnel and observers; they did not participate in the judgment process. In addition, two members of the OEAA Technical Advisory Committee – Drs. Ernie Bauer and Carol Allman – were present to observe the sessions (Dr. Bauer only on May 2).

As recommended by Questar Assessment, Inc., the MI-Access contractor, and approved by OEAA and the OEAA TAC, the general methodology used for all sessions was "item mapping." This method, initially proposed by CTB/McGraw-Hill and termed the "Bookmark Procedure™" (c.f., Mitzel, Lewis, Patz, & Green, 2001; Lewis, Green, Mitzel, Baum, & Patz, 1998), was chosen for several reasons. First, it is currently the most widely used method for setting performance standards for high-stakes K-12 educational assessments and is used in the majority of statewide testing programs for which student performance standards are determined by panels. Therefore, it is widely understood and researched by measurement professionals. Second, it is a procedure well-suited for assessments that contain multi-point performance tasks as are used for the MI-Access Participation and Supported Independence v1.5 assessments. Finally and importantly, the item-mapping procedure was the methodology used for establishing standards for the majority of the MEAP (general education) assessments.

For the MI-Access standard setting, panelists were trained to examine all items, which were ordered in a review booklet from least- to most-difficult. The Participation v1.5 assessment is composed of 10 activities, each scored a condition code, 1, 2, or 3 by each of two assessment administrators; the Supported Independence v1.5 assessment is composed of 15 activities, each scored a condition code, 1, or 2 by two assessment administrators. The scoring rubric for each assessment contains three condition codes, which count as 0 points but provide assessment administrators with instructionally relevant information on the Individual Student and Parent Reports. Note that for Participation and Supported Independence v1.5, only three unique assessments are involved – one for Grades 3 through 5, one for Grades 6 through 8, and one for Grade 11. Thus, the total number of possible points for each assessment was 60. Panelists progressed through the 60-item (page) booklet until they reached the point at which they believed a threshold student who

minimally Attained the Performance Standard should just more likely than not be able to answer the item correctly. That is, panelists placed a cut point at the item/score point at which a student who answered correctly was just barely indicating performance that Attained the Performance Standard. A similar process was then followed to establish the recommended cut point for the Surpassed the Performance Standard category.

Each panel made three separate rounds of judgments of the standards. Extensive discussions by the panelists of their interim ratings took place following the first and second rounds. Panelists were urged to explain their judgments and seek clarification of any misunderstandings during these discussions. Panel discussions in all four sessions were animated, engaged, and on-task. To encourage panel interactions and additional consensus among the group, panelists were shown (anonymously) their interim ratings compared with those of their peers. Following the first round of judgments, panelists were given a point-by-point list of the statewide "difficulty" values (percent of students scoring at or above each score point) for the assessments they were judging. These data are presented in **Appendix J** for each type of the assessments. Panelists were free to consider these data however they wished in making their subsequent recommendations. Prior to the final round of ratings, panelists were also provided with anticipated state "impact" data – that is, the expected percents of students statewide who would receive MI-Access "scores" in each of the three performance categories. These percents were based on frequency distributions of all MI-Access assessments available for processing by the contractor as of May 2. (Statewide summary data for the four assessments are provided in **Appendix K**; these data were not provided to the panels, but were the basis for determining the state "impact data" that were shown to the panels prior to Round 3 of their work.) Panelists were informed of the limitations of these data (being based on large and representative, but less-than-complete, samples of students statewide), but were informed that they might wish to consider these data during their final round of recommendations. After panelists completed their final judgments, they each filled out a short evaluation questionnaire, asking their opinions of the process and their comfort with both the procedures used and their judgments. A summary of the evaluation form completed by every participating panelist at the completion of the standard-setting sessions is presented in **Appendix L**. Across sessions, panelists generally rated all aspects of the sessions highly. They felt that the major activities of the sessions were covered successfully, considered many pertinent elements in making their recommendations, showed increased understanding of the task across rounds of ratings, well understood the data provided to them, and were confident in their judgments by the end of the session.

Appendix M tables the results by panelist by round of judgments for each of the four panels. **Appendices N** (Participation v1.5 ELA), **O** (Participation v1.5 Mathematics), **P** (Supported Independence v1.5 ELA), and **Q** (Supported Independence v1.5 Mathematics) provide summary data by round by grade of ratings for each of the panels. **Appendices N** through **Q** also display the means, medians, and standard deviations by round of judgments for both cuts (Attained and Surpassed), along with several measures of error associated with the process. These include the standard errors of the mean and median (the errors associated with the central tendency of the complete set of judges). The standard error of measurement for the particular assessment (SEM_{Test}) and an estimate of the combination of the standard errors of the test and the median of the judges ($SE_{Composite}$) are also presented in these tables. These various estimates of error provide an indication of the likely amount of imprecision in the panelists' average judgments. The bar graphs at the end of each of these appendices portray the anticipated percents of students statewide whose MI-Access scores will be classified according to the three performance labels; these bar graphs are based on using the Round 3 *median* panel recommendations. As the summary data for the four sessions illustrate, over the course of the sessions, panelists attained some convergence in their judgments concerning the appropriate placement of the standards for

the four assessments. However, members of all panels continued to have somewhat divergent opinions concerning the proper cut scores, even at Round 3 of the process.

Subsequent to the completion of the panel sessions, representatives of the contractor and OEAA reviewed all panel recommendations across the 56 cuts (2 assessments times 7 grades each times 2 cuts per grade). They agreed to suggest several small adjustments to the final panel recommendations to improve the consistency of outcomes across grade levels within assessment type. The bases for all recommended adjustments were the grade-by-grade statewide percents of students whose MI-Access score fell into one of the three performance levels. The goal in making these minor adjustments, or "smoothings," was to keep the grade-to-grade percents of students in each of the three performance categories as consistent as possible.

All adjustment recommendations were within plus or minus one or two raw scores, in all cases within a single standard error of the judges. These recommended adjustments applied to only 8 of the total of 56 cut scores recommended by the panels. Of the 8 recommended adjustments, 4 increased the cut score and 4 decreased a panel-recommended cut. Six of the 8 recommended adjustments related to the cut between Attained the Standard and Exceeded the Standard, while the other 2 pertained to the cut between Emerging and Attained. All of these recommended adjustments were carefully reviewed and approved by the state's TAC prior to submission of the final recommendations to the SBE.

Appendix M summarizes the extent of change in the panels' judgments from round to round. For simplicity sake, these data are summarized across grades for the Participation and Supported Independence v1.5 assessments. These data provide an indication of the stability of panelists' judgments across rounds of ratings.

Review of Recommendations and MDE/SBE Adoption of the Standards

All panel recommendations were shared with the OEAA's national TAC for their counsel on May 7. The final OEAA recommendations, after consideration of TAC input, were presented to the SBE at their May 8, 2007 meeting.

Additional questions concerning the assessments, the procedures used for setting performance standards or the data resulting there from, or any aspect of the development or interpretation of the MI-Access assessments should be addressed to the OEAA at the Michigan Department of Education.

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Appendix A: Draft Performance-Level Descriptors (PLDs) used by the standard-setting panels for each level of the MI-Access Assessments

ELEMENTARY MATHEMATICS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **General Statement**	Based on the Participation EGLCE, a student who is **emerging toward the performance standard** should typically (with considerable to moderate assistance be able to…)	Based on the Participation EGLCE, a student who has **attained the performance standard** should typically (with considerable to moderate assistance be able to…)	Based on the Participation EGLCE, a student who has **surpassed the performance standard** should typically (with considerable to moderate assistance be able to…)
Elementary **Performance Level Descriptor**	**Numbers and Operations** Demonstrate a limited understanding of quantity (e.g. which one has more, whole vs. part) **Numbers and Operations** Demonstrate a limited ability to solve simple problems following a sequential order	**Numbers and Operations** Demonstrate a basic understanding of quantity (e.g. which one has more, whole vs. part) **Numbers and Operations** Demonstrate a basic ability to solve simple problems following a sequential order	**Numbers and Operations** Demonstrate a consistent understanding of quantity (e.g. which one has more, whole vs. part) **Numbers and Operations** Demonstrate a consistent ability to solve simple problems following a sequential order
	Data and Probability Given data, demonstrate a limited ability to differentiate between two objects	**Data and Probability** Given data, demonstrate a basic ability to differentiate between two objects	**Data and Probability** Given data, demonstrate a consistent ability to differentiate between two objects
	Measurement Demonstrate a limited ability to understand basic units of measure (time of day, hot vs. cold, money)	**Measurement** Demonstrate a basic ability to understand basic units of measure (time of day, hot vs. cold, money)	**Measurement** Demonstrate a consistent ability to understand basic units of measure (time of day, hot vs. cold, money)
	Geometry Demonstrate a limited ability to identify simple geometric shapes and follow simple patterns	**Geometry** Demonstrate a basic ability to identify simple geometric shapes and follow simple patterns	**Geometry** Demonstrate a consistent ability to identify simple geometric shapes and follow simple patterns

MIDDLE SCHOOL MATHEMATICS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **General Statement**	Based on the *Participation EGLCE* a student who is **emerging toward the performance standard** should typically (with considerable to moderate assistance) be able to…	Based on the *Participation EGLCE* a student who **attained the performance standard** should typically (with moderate to minimal assistance) be able to…	Based on the *Participation EGLCE* a student who **surpassed the performance standard** should typically (with minimal to no assistance) be able to …
Middle School **Performance Level Descriptor**	**Numbers and Operations** Demonstrate limited ability to identify appropriate quantities (e.g. more/less, whole/part), and identify and/or extend simple patterns.	**Numbers and Operations** Demonstrate basic ability to identify appropriate quantities (e.g. more/less, whole/part), and identify and/or extend simple patterns.	**Numbers and Operations** Demonstrate substantial ability to identify appropriate quantities (e.g. more/less, whole/part), and identify and/or extend simple patterns.
	Measurement Demonstrate limited ability to apply measurement concepts (e.g. time, temp., size, money etc).	**Measurement** Demonstrate basic ability to apply measurement concepts (e.g. time, temp., size, money etc).	**Measurement** Demonstrate substantial ability to apply measurement concepts (e.g. time, temp., size, money etc).
	Geometry Demonstrate a limited ability to differentiate common shapes, locate objects/places, and apply directional/positional terms.	**Geometry** Demonstrate a basic ability to differentiate common shapes, locate objects/places, and apply directional/positional terms.	**Geometry** Demonstrate a substantial ability to differentiate common shapes, locate objects/places, and apply directional/positional terms.
	Data and Probability Demonstrate a limited ability to interpret data (e.g. differentiate between two objects).	**Data and Probability** Demonstrate a basic ability to interpret data (e.g. differentiate between two objects).	**Data and Probability** Demonstrate a substantial ability to interpret data (e.g. differentiate between two objects).

HIGH SCHOOL MATHEMATICS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
High School **General Statement**	Based on the Participation EHSCE, a student who is **emerging toward the performance standard** should typically (with moderate to considerable assistance) be able to…	Based on the Participation EHSCE, a student who **attained the performance standard** should typically (with minimal assistance) be able to…	Based on the Participation EHSCE, a student who **surpassed the performance standard** should typically (with no assistance other than standard IEP accommodations) be able to…
High School **Performance Level Descriptor**	**Number and Operations** Demonstrate limited application of numeration skills, including comparing, ordering and whole versus part.	**Number and Operations** Demonstrate basic application of numeration skills, including comparing, ordering and whole versus part.	**Number and Operations** Demonstrate application of numeration skills, including comparing, ordering and whole versus part.
	Measurement Demonstrate limited use of measurement systems, including, size, time, temperature, and money.	**Measurement** Demonstrate basic use of measurement systems, including, size, time, temperature, and money.	**Measurement** Demonstrate use of measurement systems, including, size, time, temperature, and money.
	Geometry Identify, to a limited degree, geometric shapes, the relative position of objects and their location, and follow routine patterns.	**Geometry** Identify, to a basic degree, geometric shapes, the relative position of objects and their location, and follow routine patterns.	**Geometry** Identify geometric shapes, the relative position of objects and their location, and follow routine patterns.
	Data Analysis Use and manipulate data to differentiate between objects to a limited degree.	**Data Analysis** Use and manipulate data to differentiate between objects to a basic degree.	**Data Analysis** Use and manipulate data to differentiate between objects.

ELEMENTARY MATHEMATICS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **General Statement**	Based on the *Participation EGLCE* a student who is **emerging toward the performance standard** should typically (with considerable to moderate assistance) be able to…	Based on the *Participation EGLCE* a student who **attained the performance standard** should typically (with moderate to minimal assistance) be able to…	Based on the *Participation EGLCE* a student who **surpassed the performance standard** should typically (with minimal to no assistance) be able to …
Elementary **Performance Level Descriptor**	**Numbers and Operations** Demonstrate limited counting skills and a limited understanding of the concepts describing quantity **Numbers and Operations** Demonstrate limited ability to select appropriate numbers to calculate sum and difference	**Numbers and Operations** Demonstrate basic counting skills and a basic understanding of the concepts describing quantity **Numbers and Operations** Demonstrate basic ability to select appropriate numbers to calculate sum and difference	**Numbers and Operations** Demonstrate consistent counting skills and a consistent understanding of the concepts describing quantity **Numbers and Operations** Demonstrate consistent ability to select appropriate numbers to calculate sum and difference
	Data and Probability Demonstrate limited ability to identify, gather and organize data	**Data and Probability** Demonstrate basic ability to identify, gather and organize data	**Data and Probability** Demonstrate consistent ability to identify, gather and organize data
	Measurement Demonstrate limited ability to identify coins **Measurement** Demonstrate limited ability to measure and use units (time, volume, temperature) **Measurement** Demonstrate limited understanding of geometric patterns and two dimensional shapes	**Measurement** Demonstrate basic ability to identify coins **Measurement** Demonstrate basic ability to measure and use units (time, volume, temperature) **Measurement** Demonstrate basic understanding of geometric patterns and two dimensional shapes	**Measurement** Demonstrate consistent ability to identify coins **Measurement** Demonstrate consistent ability to measure and use units (time, volume, temperature) **Measurement** Demonstrate consistent understanding of geometric patterns and two dimensional shapes
	Geometry Demonstrate limited understanding of familiar routes **Geometry** Demonstrate limited knowledge of spatial relationships (e.g. above, below)	**Geometry** Demonstrate basic understanding of familiar routes **Geometry** Demonstrate basic knowledge of spatial relationships (e.g. above, below)	**Geometry** Demonstrate consistent understanding of familiar routes **Geometry** Demonstrate consistent knowledge of spatial relationships (e.g. above, below)

MIDDLE SCHOOL MATHEMATICS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **General Statement**	Based on the *Supported Independence EGLCE*, a student who is **emerging toward the performance standard** should typically (with considerable to moderate assistance) be able to…	Based on the *Supported Independence EGLCE*, a student who **attained the performance standard** should typically (with minimal or no assistance) be able to…	Based on the *Supported Independence EGLCE*, a student who **surpassed the performance standard** should typically (with no assistance) be able to…
Middle School **Performance Level Descriptor**	**Numbers and Operations** Demonstrate limited ability to apply numeration skills,(e.g. identify appropriate quantities, count, compare, calculate) and identify and/or extend simple patterns.	**Numbers and Operations** Demonstrate basic ability to apply numeration skills,(e.g. identify appropriate quantities, count, compare, calculate) and identify and/or extend simple patterns.	**Numbers and Operations** Demonstrate substantial ability to apply numeration skills,(e.g. identify appropriate quantities, count, compare, calculate) and identify and/or extend simple patterns.
	Algebra Demonstrate limited ability to identify unknown components and quantities.	**Algebra** Demonstrate basic ability to identify unknown components and quantities.	**Algebra** Demonstrate substantial ability to identify unknown components and quantities.
	Measurement Demonstrate limited understanding of measurement concepts (e.g. time money, temp., etc) and instruments.	**Measurement** Demonstrate basic understanding of measurement concepts (e.g. time money, temp., etc) and instruments.	**Measurement** Demonstrate substantial understanding of measurement concepts (e.g. time money, temp., etc) and instruments.
	Geometry Demonstrate a limited ability to identify common shapes, locate objects/places, and follow patterns using directional/positional terms.	**Geometry** Demonstrate a basic ability to identify common shapes, locate objects/places, and follow patterns using directional/positional terms.	**Geometry** Demonstrate a substantial ability to identify common shapes, locate objects/places, and follow patterns using directional/positional terms.
	Data and Probability Demonstrate a limited ability to gather, interpret, and/or organize data.	**Data and Probability** Demonstrate a basic ability to gather, interpret, and/or organize data.	**Data and Probability** Demonstrate a substantial ability to gather, interpret, and/or organize data.

HIGH SCHOOL MATHEMATICS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
High School **General Statement**	Based on the Supported Independence EHSCE, a student who is **emerging toward the performance standard** should typically (with assistance) be able to…	Based on the Supported Independence EHSCE, a student who **attained the performance standard** should typically (with minimal or no assistance) be able to…	Based on the Supported Independence EHSCE, a student who **surpassed the performance standard** should typically (with no assistance other than standard IEP accommodations) be able to…
High School **Performance Level Descriptor**	**Numbers and Operations** Demonstrate limited application of numeration skills, including comparing, ordering, and calculating with numbers.	**Numbers and Operations** Demonstrate basic application of numeration skills, including comparing, ordering, and calculating with numbers.	**Numbers and Operation** Demonstrate application of numeration skills, including comparing, ordering, and calculating with numbers.
	Algebra Identify, to a limited degree, either the unknown component or quantity in an applied algebraic problem.	**Algebra** Identify, to a basic degree, either the unknown component or quantity in an applied algebraic problem.	**Algebra** Identify the unknown component and quantity in an applied algebraic problem.
	Measurement Demonstrate limited knowledge of and the ability to use measurement systems including length, volume, mass (weight,) time, temperature, and money.	**Measurement** Demonstrate basic knowledge of and ability to use measurement systems, including, length, volume, mass (weight,) time, temperature, and money.	**Measurement** Demonstrate knowledge of and ability to use measurement systems, including, length, volume, mass (weight,) time, temperature, and money.
	Geometry Identify, to a limited degree, geometric shapes, the relative position of objects and their location, and the ability to follow routine patterns.	**Geometry** Identify, to a basic degree, geometric shapes, the relative position of objects and their location, and the ability to follow routine patterns.	**Geometry** Identify geometric shapes, the relative position of objects and their location, and the ability to follow routine patterns.
	Data Analysis Demonstrate limited evidence of collecting, organizing or using various forms of data to solve problems.	**Data Analysis** Demonstrate basic evidence of collecting, organizing or using various forms of data to solve problems.	**Data Analysis** Demonstrate evidence of collecting, organizing or using various forms of data to solve problems.

ELEMENTARY ENGLISH LANGUAGE ARTS – Participation

Grade Span	Emerging	Attained	Surpassed
Elementary **Performance Level Descriptor**	**Accessing Information** **Word Study** Recognize limited frequently encountered objects, pictures paired w/ words	**Accessing Information** **Word Study** Recognize some frequently encountered objects, pictures paired w/ words	**Accessing Information** **Word Study** Recognize many frequently encountered pictures paired w/ words
	Accessing Information **Comprehension** Demonstrate some literal understanding ▪ Simple elements of text	**Accessing Information** **Comprehension** Demonstrate some literal understanding ▪ Simple elements of text ▪ Retell, using pictures paired w/ words, key ideas from text	**Accessing Information** **Comprehension** Demonstrate some literal understanding ▪ Simple elements of text ▪ Retell, using pictures paired w/ words, in sequence
	Expressing Ideas Responds, with assistance, to prompts to express ideas related to informational / functional / personal text and/or experiences ▪ Create personal work ▪ Contribute to classroom discussions ▪ Generate/organize ideas for a project ▪ Develop an individual style -Errors in language and/or visual conventions may make understanding difficult or nearly impossible.	**Expressing Ideas** Responds, with some assistance, to prompts to express ideas related to informational / functional / personal text and/or experiences ▪ Create personal work ▪ Contribute to classroom discussions ▪ Generate/organize ideas for a project ▪ Develop an individual style -Errors in language and/or visual conventions do not interfere with understanding	**Expressing Ideas** Responds to prompts to express ideas related to informational / functional / personal text and/or experiences ▪ Create personal work ▪ Contribute to classroom discussions ▪ Generate/organize ideas for a project ▪ Develop an individual style -Errors in language and/or visual conventions do not interfere with understanding

MIDDLE SCHOOL ENGLISH LANGUAGE ARTS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **Performance Level Descriptor**	**Accessing Information** **Word Study** Using oral or visual presentation to recognize a few frequently encountered words • Personally meaningful words • Survival words with significant teacher assistance	**Accessing Information** **Word Study** using oral or visual presentation to Recognize various frequently encountered words Personally meaningful words • survival words with some teacher assistance	**Accessing Information** **Word Study** Using oral or visual presentation to recognize many frequently encountered words • personally meaningful words • survival words with little or no teacher assistance
	Accessing Information **Comprehension** Using oral or visual presentation to identify a limited number of: • simple story elements in a narrative text • draw conclusions from informational text/functional • significant details from a variety of texts with significant teacher assistance	**Accessing Information** **Comprehension** Using oral or visual presentation to identify a few • simple story elements in a narrative text • draw conclusions from informational/ functional text • significant details from a variety of texts with some teacher assistance	**Accessing Information** **Comprehension** Using oral or visual presentation to identify most • simple story elements in a narrative text • draw conclusions from informational text/functional • significant details from a variety of texts with little or no teacher assistance
	Expressing Ideas Using personal response modes will occasionally communicate wants, needs, requests • respond to preferences and routines • Recognize and use appropriate volume and tone in various settings with possible teacher assistance	**Expressing Ideas** Using personal response modes will usually communicate wants, needs, requests • respond to preferences and routines • Recognize and use appropriate volume and tone in various settings with some teacher assistance	**Expressing Ideas** Using personal response modes will almost always communicate wants, needs, requests • respond to preferences and routines • Recognize and use appropriate volume and tone in various settings with little or no teacher assistance

HIGH SCHOOL ENGLISH LANGUAGE ARTS- Participation v1.5

Grade Span	Emerging	Attained	Surpassed
GENERAL STATEMENT	Based on the *Participation Extended Grade Level Content Expectations*, students who **are emerging toward the performance standard** should, with possible significant assistance, typically be able to:	Based on the *Participation Extended Grade Level Content Expectations*, students who **are attaining the performance standard** should, with some assistance, typically be able to:	Based on the *Participation Extended Grade Level Content Expectations*, students who **are surpassing the performance standard** should, with minimal or no assistance, typically be able to:
High School **Performance Level Descriptor**	**Word study** Use frequently encountered objects, and/or pictures paired with words, to identify and know the meaning of **Few or no** common vocabulary words including: • Frequently encountered, • Personally meaningful, and • Functional	**Word study** Use frequently encountered objects, and/or pictures paired with words, to identify and know the meaning of **some** common vocabulary words including: • Frequently encountered, • Personally meaningful, and • Functional	**Word study** Use frequently encountered objects, and/or pictures paired with words, to identify and know the meaning of **many** common vocabulary words including: • Frequently encountered, • Personally meaningful, and • Functional
	Comprehension Demonstrate understanding when accessing appropriately leveled narrative, informational, and functional text. The student will: 1. Identifies **Few or no** • Simple story elements from narrative text, • key ideas, 2. Draws **few or no** concrete conclusions from personally meaningful text 3. Makes **few or no** concrete predictions from personally meaningful text	**Comprehension** Demonstrate understanding when accessing appropriately leveled narrative, informational, and functional text. The student will 1. identify **some** of the: • Simple story elements from narrative text, • Key ideas, 2. Draws some concrete conclusions from personally meaningful text **3.** Makes **some basic** concrete predictions from personally meaningful text	**Comprehension** Demonstrate understanding when accessing appropriately leveled narrative, informational, and functional text. The student will 1. identify **many** of the: • Simple story elements from narrative text, • Key ideas, 2. Draws some concrete conclusions from personally meaningful text **3.** Makes **many** basic concrete predictions from personally meaningful text

High School **Performance Level Descriptor**	**<u>Expressing Ideas</u>** **Speaking** Using personal response modes will **occasionally** communicate wants, needs, and requests by • Responding to preferences and routines • Recognizing and using appropriate volume and tone in various settings	**<u>Expressing Ideas</u>** **Speaking** Using personal response modes will **usually** communicate wants, needs, and requests by • Responding to preferences and routines • Recognizing and using appropriate volume and tone in various settings	**<u>Expressing Ideas</u>** **Speaking** Using personal response modes **will almost always** communicate wants, needs, and requests by • Responding to preferences and routines • Recognizing and using appropriate volume and tone in various settings
	<u>Expressing Ideas</u> **Writing** Responds, with assistance, to a prompt to express ideas related to informational/functional/personal text and/or experiences • Create personal work • Contribute to classroom discussions • Generate/organize ideas for a project • Develop an individual style Error in language and/or visual conventions do not interfere with understanding	**<u>Expressing Ideas</u>** **Writing** Responds, with **some** assistance, to a prompt to express ideas related to informational/functional/personal text and/or experiences • Create personal work • Contribute to classroom discussions • Generate/organize ideas for a project • Develop an individual style Error in language and/or visual conventions do not interfere with understanding	**<u>Expressing Ideas</u>** **Writing** Responds to a prompt to express ideas related to informational/functional/personal text and/or experiences • Create personal work • Contribute to classroom discussions • Generate/organize ideas for a project • Develop an individual style Error in language and/or visual conventions do not interfere with understanding

ELEMENTARY ENGLISH LANGUAGE ARTS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **Performance Level Descriptor**	**Accessing Information** **Word Study** Use picture-printed word associations to identify limited common vocabulary words, familiar context, including ▪ Structural cues ▪ Personally meaningful words ▪ Frequently encountered words ▪ Functional words or signs	**Accessing Information** **Word Study** Use picture-printed word associations to identify many common vocabulary words, familiar context, including ▪ Structural cues ▪ Personally meaningful words ▪ Frequently encountered words ▪ Functional words or signs	**Accessing Information** **Word Study** Use picture-printed word associations to identify many common vocabulary words, familiar/unfamiliar context, including ▪ Structural cues ▪ Personally meaningful words ▪ Frequently encountered words ▪ Functional words or signs
	Accessing Information **Comprehension** Demonstrate limited literal understanding when accessing print from appropriately leveled narrative, informational, and functional texts. ▪ Simple story elements (character, setting) ▪ Retell, using picture prompts and/or words, events from beginning, middle, end	**Accessing Information** **Comprehension** Demonstrate some literal understanding when accessing print from appropriately leveled narrative, informational, and functional texts. ▪ Simple story elements (character, setting) ▪ Retell, using picture prompts and/or words, events from beginning, middle, end	**Accessing Information** **Comprehension** Demonstrate more complex understanding when accessing print from appropriately leveled narrative, informational, and functional texts. ▪ Story elements ▪ Retell, using picture prompts and/or words, events from beginning, middle, end ▪ Draw conclusions ▪ Make predictions
	Expressing Ideas Respond to prompts, with assistance, through personal narratives and informational / functional pieces that ▪ Are somewhat focused on the topic ▪ Include limited details and/or examples ▪ Demonstrate limited organization Attempts to write name -Errors in language and/or visual conventions may make understanding difficult or nearly impossible.	**Expressing Ideas** Respond to prompts through personal narratives and informational / functional pieces that ▪ Are mostly focused on the topic ▪ Include some details and/or examples ▪ Organized in a logical sequence Legibly write first and last name. -Errors in language and/or visual conventions do not interfere with understanding	**Expressing Ideas** Respond to prompts through personal narratives and informational / functional pieces that ▪ Are mostly focused on the topic ▪ Include several details and/or examples ▪ Organized in a logical sequence Legibly write first and last name and other personal information -Errors in language and/or visual conventions do not interfere with understanding

MIDDLE SCHOOL ENGLISH LANGUAGE ARTS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **Performance Level Descriptor**	**Accessing Information** **Word Study** Using written, oral or visual presentation will: • use a few structural cues to recognize words • use a few semantic and syntactic cues • recognize and explain the meaning of a few frequently encountered words, and meaningful words in context • categorize a few words by theme, topic, and group	**Accessing Information** **Word Study** Using written, oral or visual presentation, will**:** • use many structural cues to recognize words • use many semantic and syntactic cues • recognize and begin to explain the meaning of many frequently encountered words, and meaningful words in context • categorize many words by theme, topic, and group	**Accessing Information** **Word Study** Using written, oral or visual presentation will: • use most or all structural cues to recognize words • use most or all semantic and syntactic cues • recognize and explain the meaning of most or all frequently encountered words, and meaningful words in context • categorize most or all words by theme, topic, and group
	Accessing Information **Comprehension** Using written, oral or visual presentation will **attempt to**: Identify common human experiences from a variety of genre • Identify simple story element • Identify whether a story element is fact or fiction • Identify and use a variety of informational text • retell story events • Draw conclusions and make predictions about a story • Follow directions	**Accessing Information** **Comprehension** Using written, oral or visual presentation will **usually**: Identifies common human experiences from a variety of genre • Identifies simple story elements • Identifies whether a story element is fact or fiction • Identify and use a variety of informational text • retelling story event • Draw conclusions and make predictions about a story • Follow directions	**Accessing Information** **Comprehension** Using written, oral or visual presentation **will**: Identify common human experiences from a variety of genre • Identify simple story element • Identify whether a story element is fact or fiction • Identify and use a variety of informational text • retelling story event • Drawing conclusions and making predictions about a story • Follow directions
	Expressing Ideas Responds to prompts with assistance through personal narratives, and informational/functional pieces that: • are **somewha**t focused on the topic • Include **limited** details and/or examples • Demonstrate **limited** organization • use language to communicate for different purposes • Recognize and use appropriate volume and tone in various settings • advocate for self	**Expressing Ideas** Responds to prompts with assistance through personal narratives, and informational/functional pieces that: • are **mostly** focused on the topic • Include **some** details and/or examples • Organized in logical sequence • use language to communicate for different purposes • Recognize and use appropriate volume and tone in various settings • advocate for self	**Expressing Ideas** Responds to prompts with assistance through personal narratives, and informational/functional pieces that: • **are mostly** focused on the topic • Include **several** details and/or examples • Organized in logical sequence • use language to communicate for different purposes • Recognize and use appropriate volume and tone in various settings • advocate for self

HIGH SCHOOL ENGHLISH LANGUAGE ARTS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
GENERAL STATEMENT	Based on the *Supported Independence Extended Grade Level Content Expectations*, students who **are emerging toward the performance standard** should, with possible significant assistance, typically be able to:	Based on the *Supported Independence Extended Grade Level Content Expectations*, students who **are attaining the performance standard** should, with some assistance, typically be able to:	Based on the *Supported Independence Extended Grade Level Content Expectations*, students who **are surpassing the performance standard** should, with minimal or no assistance, typically be able to:
High School **Performance Level Descriptor**	**Word study** Use picture/printed word associations, context clues and/or basic word analysis skills to identify and know the meaning of **some** common vocabulary words including: • Frequently encountered, • Personally meaningful, • Functional, and • Key content area words.	**Word study** Use picture/printed word associations, context clues and/or basic word analysis skills to identify and know the meaning of **many** common vocabulary words including: • Frequently encountered, • Personally meaningful, • Functional, and • Key content area words.	**Word study** Use picture/printed word associations, context clues and/or basic word analysis skills to identify and know the meaning of **most or all** common vocabulary words including: • Frequently encountered, • Personally meaningful, • Functional, and • Key content area words.
	Comprehension Demonstrate understanding, make simple inferences, and make connections when accessing appropriately leveled narrative, informational, and functional text the student will: 1. Identify **some** of the • Simple story elements from narrative text, • Meanings of key vocabulary words, • Main idea and significant details • Author's purpose (FC) • Components of a Sequence 2. Retell and summarize 3. Describe relationships 4. Apply information	**Comprehension** Demonstrate understanding, make simple inferences, and make connections when accessing appropriately leveled narrative, informational, and functional text the student will 1. identify **many** of the: • Simple story elements from narrative text, • Meanings of key vocabulary words, • Main idea and significant details • Author's purpose (FC) • Components of a Sequence 2. Retell and summarize 3. Describe relationships 4. Apply information	**Comprehension** Demonstrate understanding, make simple inferences, and make connections when accessing appropriately leveled narrative, informational, and functional text the student will 1. identify **most or all** of the: • Simple story elements from narrative text, • Meanings of key vocabulary words, • Main idea and significant details • Author's purpose (FC) • Components of a Sequence 2. Retell and summarize 3. Describe relationships 4. Apply information

High School **Performance Level Descriptor**	**Expressing Ideas** **Speaking** Using personal response modes will **occasionally** communicate ideas and/or advocate by • Maintaining focus while engaging in conversation • Adjusting the use of language (verbal and nonverbal) effectively • Recognizing and using appropriate volume and tone in various settings **Writing** Respond to a prompt through narratives and informational pieces that typically • Provide little focus • Shows limited topic development • Shows little or no organization • Shows little or no attention to word choice Error in language and/or visual conventions do not interfere with understanding	**Expressing Ideas** **Speaking** Using personal response modes will **usually** communicate ideas and/or advocate by • Maintaining focus while engaging in conversation • Adjusting the use of language (verbal and nonverbal) effectively • Recognizing and using appropriate volume and tone in various settings **Writing** Respond to a prompt through narratives and informational pieces that typically • Are mostly focused on the topic • Provide details and/ or examples • Are Somewhat logically organized • Shows some attention to word choice Error in language and/or visual conventions do not interfere with understanding	**Expressing Ideas** **Speaking** Using personal response modes will communicate ideas and/or advocate by • Maintaining focus while engaging in conversation • Adjusting the use of language (verbal and nonverbal) effectively • Recognizing and using appropriate volume and tone in various settings **Writing** Respond to a prompt through narratives and informational pieces that typically • Maintain focus on topic • Develop the topic with details and/or examples • Are logically organized • Shows attention to word choice and sentence structure

Appendix B: Final Performance-Level Descriptors (PLDs)-includes the standard-setting panel recommendations for each level of the MI-Access Assessments

ELEMENTARY MATHEMATICS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **General Statement**	Based on the *Participation EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who has **attained the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who has **surpassed the performance standard** should typically, with moderate to limited assistance, be able to…
Elementary **Performance Level Descriptor**	**Numbers and Operations** demonstrate a *limited* understanding of quantity (e.g., which one has more, whole vs. part) and a limited ability to solve simple problems following a sequential order.	**Numbers and Operations** demonstrate a *basic* understanding of quantity (e.g., which one has more, whole vs. part) and a basic ability to solve simple problems following a sequential order.	**Numbers and Operations** demonstrate a *consistent* understanding of quantity (e.g., which one has more, whole vs. part) and a consistent ability to solve simple problems following a sequential order.
	Data and Probability given data, demonstrate a *limited* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).	**Data and Probability** given data, demonstrate a *basic* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).	**Data and Probability** given data, demonstrate a *consistent* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).
	Measurement demonstrate a *limited* ability to understand basic units of measure (e.g., time of day, hot vs. cold, money).	**Measurement** demonstrate a *basic* ability to understand basic units of measure (e.g., time of day, hot vs. cold, money).	**Measurement** demonstrate a *consistent* ability to understand basic units of measure (e.g., time of day, hot vs. cold, money).
	Geometry demonstrate a *limited* ability to identify simple geometric shapes and follow simple patterns.	**Geometry** demonstrate a *basic* ability to identify simple geometric shapes and follow simple patterns.	**Geometry** demonstrate a *consistent* ability to identify simple geometric shapes and follow simple patterns.

[8]Available at www.michigan.gov/mde

MIDDLE SCHOOL MATHEMATICS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **General Statement**	Based on the *Participation EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who **attained the performance standard** should typically, with moderate to minimal assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
Middle School **Performance Level Descriptor**	**Numbers and Operations** demonstrate a *limited* ability to identify appropriate quantities (e.g., more/less, whole/part), and identify and/or extend simple patterns.	**Numbers and Operations** demonstrate a *basic* ability to identify appropriate quantities (e.g., more/less, whole/part), and identify and/or extend simple patterns.	**Numbers and Operations** demonstrate a *consistent* ability to identify appropriate quantities (e.g., more/less, whole/part), and identify and/or extend simple patterns.
	Measurement demonstrate a *limited* ability to apply measurement concepts (e.g., time, temp., size, money etc.).	**Measurement** demonstrate a *basic* ability to apply measurement concepts (e.g., time, temp., size, money etc.).	**Measurement** demonstrate a *consistent* ability to apply measurement concepts (e.g., time, temp., size, money etc.).
	Geometry demonstrate a *limited* ability to differentiate common shapes, locate objects/places, and apply directional/positional terms.	**Geometry** demonstrate a *basic* ability to differentiate common shapes, locate objects/places, and apply directional/positional terms.	**Geometry** demonstrate a *consistent* ability to differentiate common shapes, locate objects/places, and apply directional/positional terms.
	Data and Probability given data, demonstrate a *limited* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).	**Data and Probability** given data, demonstrate a *basic* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).	**Data and Probability** given data, demonstrate a *consistent* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).

HIGH SCHOOL MATHEMATICS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
High School **General Statement**	Based on the *Participation EHSCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EHSCEs*,[8] a student who **attained the performance standard** should typically, with moderate to minimal assistance, be able to…	Based on the *Participation EHSCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
High School **Performance Level Descriptor**	**Number and Operations** demonstrate *limited* application of numeration skills, including comparing, ordering, and whole versus part.	**Number and Operations** demonstrate *basic* application of numeration skills, including comparing, ordering, and whole versus part.	**Number and Operations** demonstrate *consistent* application of numeration skills, including comparing, ordering, and whole versus part.
	Measurement demonstrate *limited* understanding and/or application of measurement systems, including, size, time, temperature, and money.	**Measurement** demonstrate *basic* understanding and/or application of measurement systems, including, size, time, temperature, and money.	**Measurement** demonstrate *consistent* understanding and/or application of measurement systems, including, size, time, temperature, and money.
	Geometry identify, to a *limited* degree, geometric shapes, the relative position of objects and their location, and follow routine patterns.	**Geometry** identify, to a *basic* degree, geometric shapes, the relative position of objects and their location, and follow routine patterns.	**Geometry** *consistently* identify geometric shapes, the relative position of objects and their location, and follow routine patterns.
	Data Analysis given data, demonstrate a *limited* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).	**Data Analysis** given data, demonstrate a *basic* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).	**Data Analysis** given data, demonstrate a *consistent* ability to interpret it meaningfully (e.g., select which one of two objects is necessary to complete a task).

ELEMENTARY MATHEMATICS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **General Statement**	Based on the *Supported Independence EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **attained the performance standard** should typically, with moderate to minimal assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
Elementary **Performance Level Descriptor**	**Numbers and Operations** demonstrate *limited* counting skills, a limited understanding of the concepts used to describe quantity, and a limited ability to select appropriate numbers to calculate sum and difference.	**Numbers and Operations** demonstrate *basic* counting skills, a basic understanding of the concepts used to describe quantity, and a basic ability to select appropriate numbers to calculate sum and difference.	**Numbers and Operations** demonstrate *consistent* counting skills, a consistent understanding of the concepts used to describe quantity, and a consistent ability to select appropriate numbers to calculate sum and difference.
	Data and Probability demonstrate *limited* ability to identify, gather and organize data.	**Data and Probability** demonstrate *basic* ability to identify, gather and organize data.	**Data and Probability** demonstrate *consistent* ability to identify, gather and organize data.
	Measurement demonstrate a *limited* ability to identify coins, measure and use units (e.g., time, volume, temperature) and demonstrate limited understanding of geometric patterns and two dimensional shapes.	**Measurement** demonstrate a *basic* ability to identify coins, measure and use units (e.g., time, volume, temperature) and demonstrate basic understanding of geometric patterns and two dimensional shapes.	**Measurement** demonstrate a *consistent* ability to identify coins, measure and use units (e.g., time, volume, temperature) and demonstrate consistent understanding of geometric patterns and two dimensional shapes.
	Geometry demonstrate a *limited* understanding of familiar routes and limited knowledge of spatial relationships (e.g., above, below).	**Geometry** demonstrate a *basic* understanding of familiar routes and basic knowledge of spatial relationships (e.g., above, below).	**Geometry** demonstrate a *consistent* understanding of familiar routes and consistent knowledge of spatial relationships (e.g., above, below).

MIDDLE SCHOOL MATHEMATICS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **General Statement**	Based on the *Supported Independence EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **attained the performance standard** should typically, with minimal to no assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
Middle School **Performance Level Descriptor**	**Numbers and Operations** demonstrate a *limited* ability to apply numeration skills, (e.g., identify appropriate quantities, count, compare, calculate) and identify and/or extend simple patterns.	**Numbers and Operations** demonstrate a *basic* ability to apply numeration skills, (e.g., identify appropriate quantities, count, compare, calculate) and identify and/or extend simple patterns.	**Numbers and Operations** demonstrate a *consistent* ability to apply numeration skills, (e.g., identify appropriate quantities, count, compare, calculate) and identify and/or extend simple patterns.
	Algebra demonstrate a *limited* ability to identify unknown components and quantities to solve a problem.	**Algebra** demonstrate a *basic* ability to identify unknown components and quantities to solve a problem.	**Algebra** demonstrate a *consistent* ability to identify unknown components and quantities to solve a problem.
	Measurement demonstrate a *limited* understanding and/or application of measurement concepts (e.g., time money, temp., etc.) and instruments.	**Measurement** demonstrate a *basic* understanding and/or application of measurement concepts (e.g., time money, temp., etc.) and instruments.	**Measurement** demonstrate a *consistent* understanding and/or application of measurement concepts (e.g., time money, temp., etc.) and instruments.
	Geometry demonstrate a *limited* ability to identify common shapes, locate objects/places, and follow patterns using directional/positional terms.	**Geometry** demonstrate a *basic* ability to identify common shapes, locate objects/places, and follow patterns using directional/positional terms.	**Geometry** demonstrate a *consistent* ability to identify common shapes, locate objects/places, and follow patterns using directional/positional terms.
	Data and Probability demonstrate a *limited* ability to gather, interpret, and/or organize data.	**Data and Probability** demonstrate a *basic* ability to gather, interpret, and/or organize data.	**Data and Probability** demonstrate a *consistent* ability to gather, interpret, and/or organize data.

HIGH SCHOOL MATHEMATICS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
High School **General Statement**	Based on the *Supported Independence EHSCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Supported Independence EHSCEs*,[8] a student who **attained the performance standard** should typically, with minimal or no assistance, be able to…	Based on the *Supported Independence EHSCEs*,[8]**8** a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
High School **Performance Level Descriptor**	**Numbers and Operations** demonstrate *limited* application of numeration skills, including comparing, ordering, and calculating with numbers.	**Numbers and Operations** demonstrate *basic* application of numeration skills, including comparing, ordering, and calculating with numbers.	**Numbers and Operation** demonstrate *consistent* application of numeration skills, including comparing, ordering, and calculating with numbers.
	Algebra demonstrate a *limited* ability to identify unknown components and quantities to solve a problem.	**Algebra** demonstrate a *basic* ability to identify unknown components and quantities to solve a problem.	**Algebra** demonstrate a *consistent* ability to identify unknown components and quantities to solve a problem.
	Measurement demonstrate a *limited* understanding and/or application of measurement concepts (e.g., length, volume, mass (weight), time, temperature, and money).	**Measurement** demonstrate a *basic* understanding and/or application of measurement concepts (e.g., length, volume, mass (weight), time, temperature, and money).	**Measurement** demonstrate a *consistent* understanding and/or application of measurement concepts (e.g., length, volume, mass (weight), time, temperature, and money).
	Geometry identify, to a *limited* degree, geometric shapes, the relative position of objects and their location, and the ability to follow routine patterns.	**Geometry** identify, to a *basic* degree, geometric shapes, the relative position of objects and their location, and the ability to follow routine patterns.	**Geometry** *consistently* identify geometric shapes, the relative position of objects and their location, and the ability to follow routine patterns.
	Data Analysis demonstrate *limited* evidence of collecting, organizing, or using various forms of data to solve problems.	**Data Analysis** demonstrate *basic* evidence of collecting, organizing, or using various forms of data to solve problems.	**Data Analysis** demonstrate *consistent* evidence of collecting, organizing, or using various forms of data to solve problems.

ELEMENTARY ENGLISH LANGUAGE ARTS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **General Statement**	Based on the *Participation EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who has **attained the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who has **surpassed the performance standard** should typically, with moderate to limited assistance, be able to…
Elementary **Performance Level Descriptor**	**Accessing Information: Word Study** recognize a *few* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols).	**Accessing Information: Word Study** recognize *some* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols).	**Accessing Information: Word Study** recognize *many* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols).
	Accessing Information: Comprehension demonstrate *limited understanding* of simple text elements (e.g., main characters, setting). demonstrate *limited understanding* of simple directions regarding routines.	**Accessing Information: Comprehension** demonstrate *basic understanding* of simple text elements (e.g., main characters, setting). demonstrate *basic understanding* of simple directions regarding routines.	**Accessing Information: Comprehension** demonstrate *understanding* of simple text elements (e.g., main characters, setting). demonstrate *understanding* of simple directions regarding routines.
	Expressing Ideas respond to prompts with the expression of *limited ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). maintain *limited* conversational focus (e.g., eye contact).	**Expressing Ideas** respond to prompts with the expression of *basic ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). maintain *basic* conversational focus (e.g., eye contact).	**Expressing Ideas** respond to prompts with the expression of *ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/ expressions). maintain conversational focus (e.g., eye contact).

MIDDLE SCHOOL ENGLISH LANGUAGE ARTS – Participation v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **General Statement**	Based on the *Participation EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who has **attained the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EGLCEs*,[8] a student who has **surpassed the performance standard** should typically, with moderate to limited assistance, be able to…
Middle School **Performance Level Descriptor**	**Accessing Information: Word Study** recognize and demonstrate *limited understanding* of a *few* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols).	**Accessing Information: Word Study** recognize and demonstrate *basic understanding* of *some* frequently encountered objects and/or pictures paired with words.	**Accessing Information: Word Study** recognize and demonstrate *understanding* of *many* frequently encountered objects and/or pictures paired with words.
	Accessing Information: Comprehension demonstrate *limited understanding* of simple text elements (e.g., main characters, setting). demonstrate *limited understanding* of simple questions regarding familiar routines and experiences.	**Accessing Information: Comprehension** demonstrate *basic understanding* of simple text elements (e.g., main characters, setting). demonstrate *basic understanding* of simple questions regarding familiar routines and experiences.	**Accessing Information: Comprehension** demonstrate *understanding* of simple text elements (e.g., main characters, setting). demonstrate *understanding* of simple questions regarding familiar routines and experiences.
	Expressing Ideas respond to prompts with *limited ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). maintain *limited* conversational focus and participation (e.g., eye contact, gesture, expressions).	**Expressing Ideas** respond to prompts with *basic ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). maintain *basic* conversational focus and participation (e.g., eye contact, gesture, expressions).	**Expressing Ideas** respond to prompts with *ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/ expressions). maintain conversational focus and participation (e.g., eye contact, gesture, expressions).

HIGH SCHOOL ENGLISH LANGUAGE ARTS- Participation v1.5

Grade Span	Emerging	Attained	Surpassed
High School **General Statement**	Based on the *Participation EHSCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EHSCEs*,[8] a student who has **attained the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Participation EHSCEs*,[8] a student who has **surpassed the performance standard** should typically, with moderate to limited assistance, be able to…
High School **Performance Level Descriptor**	**Accessing Information: Word Study** recognize and demonstrate *limited understanding* of a *few* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols) in specific contexts (e.g., vocational, recreational).	**Accessing Information: Word Study** recognize and demonstrate *basic understanding* of *some* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols) in specific contexts (e.g., vocational, recreational).	**Accessing Information: Word Study** recognize and demonstrate *understanding* of *many* frequently encountered objects and/or pictures paired with words (e.g., name, survival words/symbols) in specific contexts (e.g., vocational, recreational).
	Accessing Information: Comprehension demonstrate *limited understanding* of simple text elements (e.g., main characters, setting). demonstrate *limited understanding* of simple questions related to assigned tasks.	**Accessing Information: Comprehension** demonstrate *basic understanding* of simple text elements (e.g., main characters, setting). demonstrate *basic understanding* of simple questions related to assigned tasks.	**Accessing Information: Comprehension** demonstrate *understanding* of simple text elements (e.g., main characters, setting). demonstrate *understanding* of simple questions related to assigned tasks.
	Expressing Ideas respond to prompts with *limited ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). maintain *limited* conversational focus and participation (e.g., eye contact, gesture, expressions).	**Expressing Ideas** respond to prompts with *basic ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). maintain *basic* conversational focus and participation (e.g., eye contact, gesture, expressions).	**Expressing Ideas** respond to prompts with *ideas* related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/ expressions). maintain conversational focus and participation (e.g., eye contact, gesture, expressions).

ELEMENTARY ENGLISH LANGUAGE ARTS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Elementary **General Statement**	Based on the *Supported Independence EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **attained the performance standard** should typically, with moderate to minimal assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
Elementary **Performance Level Descriptor**	**Accessing Information: Word Study** recognize a *few*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary demonstrate understanding of a *few* functional words/symbols (e.g., exit, danger).	**Accessing Information: Word Study** recognize *some*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary demonstrate understanding of *some* functional words/symbols (e.g., exit, danger).	**Accessing Information: Word Study** recognize *many*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary demonstrate understanding of *many* functional words/symbols (e.g., exit, danger).
	Accessing Information: Comprehension demonstrate *limited* understanding of narrative, informational, and functional texts (e.g., story elements, characters, major ideas, headings/subheadings). demonstrate *limited* ability to take part in an audience (e.g., active listening). follow *simple* directions to complete a task (e.g., completing assignments, locating instructional materials, preparing for dismissal).	**Accessing Information: Comprehension** demonstrate *basic* understanding of narrative, informational, and functional texts (e.g., story elements, characters, major ideas, headings/subheadings). demonstrate *basic* ability to take part in an audience (e.g., active listening). follow *basic* directions to complete a task (e.g., completing assignments, locating instructional materials, preparing for dismissal).	**Accessing Information: Comprehension** demonstrate *advanced* understanding of narrative, informational, and functional texts (e.g., story elements, characters, major ideas, headings/ subheadings).. demonstrate *advanced* ability to take part in an audience (e.g., active listening). follow *complex* directions to complete a task (e.g., completing assignments, locating instructional materials, preparing for dismissal).
	Expressing Ideas respond to prompts with *limited* ideas, organization and detail related to informational, functional or personal text and experiences (e.g.,	**Expressing Ideas** respond to prompts with *basic* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to	**Expressing Ideas** respond to prompts with *more complex* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to

	contributing to classroom discussions, using appropriate language/expressions). demonstrate *limited* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). Demonstrate *limited* ability to write/scribe personally meaningful names and simple words (e.g., names of family members, school related words)	classroom discussions, using appropriate language/expressions). demonstrate *basic* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). Demonstrate *basic* ability to write/scribe personally meaningful names and simple words (e.g., names of family members, school related words)	classroom discussions, using appropriate language/expressions). demonstrate *advanced* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). Demonstrate *advanced* ability to write/scribe personally meaningful names and simple words (e.g., names of family members, school related words)

MIDDLE SCHOOL ENGLISH LANGUAGE ARTS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
Middle School **General Statement**	Based on the *Supported Independence EGLCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **attained the performance standard** should typically, with moderate to minimal assistance, be able to…	Based on the *Supported Independence EGLCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
Middle School **Performance Level Descriptor**	**Accessing Information: Word Study** recognize a *few*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary explain the meaning of a *few* functional word/symbols s (e.g., exit, danger).	**Accessing Information: Word Study** recognize *some*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary explain the meaning of *some* functional words/symbols (e.g., exit, danger).	**Accessing Information: Word Study** recognize *many*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary explain the meaning of *many* functional words/symbols (e.g., exit, danger).
	Accessing Information: Comprehension demonstrate *limited* understanding of narrative, informational, and functional texts (e.g., story elements, characters, setting) and draw simple conclusions from written material. demonstrate *limited* ability to take part in an audience (e.g., active listening, question asking). follow *simple* directions to complete an instructional task and/or vocational assignment (e.g., locating materials, completing a classroom job).	**Accessing Information: Comprehension** demonstrate *basic* understanding of narrative, informational, and functional texts (e.g., story elements, characters, setting) and draw basic conclusions from written material. demonstrate *basic* ability to take part in an audience (e.g., active listening, question asking). follow *basic* directions to complete an instructional task and/or vocational assignment (e.g., locating materials, completing a classroom job).	**Accessing Information: Comprehension** demonstrate *advanced* understanding of narrative, informational, and functional texts (e.g., story elements, characters, setting) and draw more complex conclusions from written material. demonstrate *advanced* ability to take part in an audience (e.g., active listening, question asking). follow *more complex* directions to complete an instructional task and/or vocational assignment (e.g., locating materials, completing a classroom job).

	Expressing Ideas respond to prompts with *limited* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). demonstrate *limited* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). demonstrate *limited* ability to write/dictate simple sentences using personally meaningful words (e.g., names of family members, school related words)	**Expressing Ideas** respond to prompts with *basic* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). demonstrate *basic* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). demonstrate *basic* ability to write/dictate simple sentences using personally meaningful words (e.g., names of family members, school related words)	**Expressing Ideas** respond to prompts with *more complex* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). demonstrate *advanced* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). demonstrate *advanced* ability to write/dictate simple sentences using personally meaningful words (e.g., names of family members, school related words)

HIGH SCHOOL ENGLISH LANGUAGE ARTS – Supported Independence v1.5

Grade Span	Emerging	Attained	Surpassed
High School **General Statement**	Based on the *Supported Independence EHSCEs*,[8] a student who is **emerging toward the performance standard** should typically, with considerable to moderate assistance, be able to…	Based on the *Supported Independence EHSCEs*,[8] a student who **attained the performance standard** should typically, with moderate to minimal assistance, be able to…	Based on the *Supported Independence EHSCEs*,[8] a student who **surpassed the performance standard** should typically, with minimal to no assistance, be able to…
High School **Performance Level Descriptor**	**Accessing Information: Word Study** recognize a *few*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary explain the meaning of a *few* functional word/symbols s (e.g., exit, danger) as the appear in functional text.	**Accessing Information: Word Study** recognize *some*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary explain the meaning of *some* functional word/symbols s (e.g., exit, danger) as the appear in functional text.	**Accessing Information: Word Study** recognize *many*: • frequently encountered/ personally meaningful words (e.g., name, address, family members) • functional words (e.g., exit, danger) • content area specific vocabulary explain the meaning of *many* functional word/symbols s (e.g., exit, danger) as the appear in functional text.
	Accessing Information: Comprehension demonstrate *limited* understanding of narrative, informational, and functional texts (e.g., story elements, characters, setting) and draw simple conclusions from written material. demonstrate *limited* ability to take part in an audience (e.g., active listening, question asking). follow *simple* directions to complete an instructional task and/or vocational assignment (e.g., locating materials, completing classroom job).	**Accessing Information: Comprehension** demonstrate *basic* understanding of narrative, informational, and functional texts (e.g., story elements, characters, setting) and draw basic conclusions from written material. demonstrate *basic* ability to take part in an audience (e.g., active listening, question asking). follow *basic* directions to complete an instructional task and/or vocational assignment (e.g., locating materials, completing classroom job).	**Accessing Information Comprehension** demonstrate *advanced* understanding of narrative, informational, and functional texts (e.g., story elements, characters, setting) and draw more complex conclusions from written material. demonstrate *advanced* ability to take part in an audience (e.g., active listening, question asking). follow *more complex* directions to complete an instructional task and/or vocational assignment (e.g., locating materials, completing classroom job).

	Expressing Ideas respond to prompts with *limited* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). demonstrate *limited* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). demonstrate *limited* ability to write/dictate complete sentences using personally meaningful words (e.g., names of family members, school related words)	**Expressing Ideas** respond to prompts with *basic* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). demonstrate *basic* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). demonstrate *basic* ability to write/dictate complete sentences using personally meaningful words (e.g., names of family members, school related words)	**Expressing Ideas** respond to prompts with *more complex* ideas, organization and detail related to informational, functional or personal text and experiences (e.g., contributing to classroom discussions, using appropriate language/expressions). demonstrate *advanced* ability to engage in conversations while discussing familiar topics (e.g., remain focused on topic). demonstrate *advanced* ability to write/dictate complete sentences using personally meaningful words (e.g., names of family members, school related words)

Appendix C: Standard Setting Sessions Agenda and Plan

MI-Access Participation & Supported Independence v1.5
English Language Arts and Mathematics

Standard-Setting Sessions
Agenda
May 2-3, 2007

May 2, 2007

8:30 – 8:45 **Welcome, Introductions, Logistics** (Large-Group session – all panels together)
- Place of this activity in the overall *MI-Access* schedule
- Logistics – expenses/honoraria, schedule, problem-solving

8:45 – 9:45 **Overview of *MI-Access* Assessment System** *Peggy Dutcher*
- *Current* Participation & Supported Independence v1.5 Assessments
- Plans for "Second Edition" Participation & Supported Independence v1.5
- Functional Independence assessments
- Next steps for *MI-Access* Program

Current Status of P/SI Assessments & Standards *Peggy Dutcher*
- Alignment of P/SI with EGLCEs
- *Current* performance standards for P/SI assessments & need for change
- Current standards set for Phase 1.0 P/SI, and statewide impact data for these changes in content of the assessments for 2006-2007
- How P/SI assessments are scored – PEs, activities, double scoring, etc.
  - Overview of "agreement data" between the two assessors for P/SI V1.5 1.5

9:45 – 10:30 **Setting Performance Standards – General Process** *Mike Beck*
- Agenda for the 2 days of meetings
- Delimit the panels' activities – "Ground rules"
- What does it mean to set "performance standards"?
  - Overview of the general process of setting standards
  - Process of placing cut scores to segment a continuum of performance
    - Drawing a discrete cutoff (threshold students)
    - Errors of classification in any measurement process
    - Why multiple rounds are required
    - Keys to making good judgments
    - What happens *next* – panels as advisory, not decision-makers

10:30 - 10:45 **Break**

10:45 – 11:30 **Definitions and Description of Performance Standards**
(panelists break into 4 individual sessions, separately facilitated)
- Performance Level Descriptors developed by the state and their import/use
  - What does is *mean* for a student to be described this way –
  - What can these students *do*? What do they *know*?

11:30 – 12:15 **"Experience" the Assessment** (continued after lunch as necessary)
- "Take" the actual assessment on which standards will be set – answer questions, take notes
- Discuss the test – content, concerns, difficulty, and "construct" issues

12:15-1:15 **Lunch**

May 2, 2007 cont.

1:15 – 1:45 **"Experience" the Assessment (cont. if necessary)**

1:45 – 2:20 **Orientation to the Specific Standard-Setting Methodology – Item Mapping**

- "Mechanics" of setting standards
  - Judges' task
  - Features of the procedure

2:20 – 3:00 **"Practice Session" on Setting Standards**

- Panelists use a short "practice test" of content to tryout the procedure
- Discussion of problems/questions on the *mechanics* of setting standards

3:00 - 3:15 **Break**

3:15 – 3:45 **Preparation for Round 1 of Judgments**

- Reminders of key issues – threshold, PLDs, all *MI-Access* students
- Distribute materials and orient panelists to use
- What to do – mechanics of making judgments for all cuts
- Rules for judgments – anonymity, independence, security of materials
- Day 2 preview

3:45 – 5:15 **First Round of Judges' Work**

- Panelists work independently, recommending standards for all *seven* grades at one time, turning in their rating sheets and leaving for the day when completed.

May 3, 2007

8:30 – 8:45 **Review of Round 1 Issues and Problems**

- Questions/Observations of judges to the process in Round 1
- Clarification of general issues and "mechanics" of the process

8:45 – 10:45 **Feedback & Discussion of Round 1 Judgments**

- Round 1 feedback by grade – Graphic portrayal of panelists' judgments (anonymous)
  - Meaning of Round 1 judgments - distribution of cuts, median/mean cut
  - Discussion of *WHY*'s for Round 1 (i.e., what led panelists to set their standards as they did? Problems, issues, confusions, rationales for preliminary standards)
- Discussion of selected items or score points on extremes and near the middle of the Round 1 distribution of cuts
- Viewing the recommended standards across grade levels – do these make sense?
  - "Shaping" of panelists' considerations, focusing on critical considerations (threshold performance, "should *vs*. will," PLDs, item rating procedural confusions, construct issues)
- Purpose of Rounds 2 & 3 – reflection, reconsideration, and comfort, not consensus
- Present statewide student performance data by activity (*task difficulty* values)
  - What the data *mean* and why they are only minimally useful in setting standards
- Reminder of key considerations

10:45 - 11:00 **Break**

11:00 – 12:15 **Round 2 of Judges' Work**

Opportunity to reconsider and adjust Round 1 judgments for both tests

12:15 – 1:15 **Lunch**

1:15 – 2:30 **Review of Round 2 Judgments**

- Questions/Observations of judges on the process
- Feedback and discussions much like that for Round 1
- Projected "impact data" – implications of the Round 2 recommendations
- Discussion of impact data resulting from Phase 1 assessments in 2006, and desirability of keeping current standards "comparable"
- Discussion of selected items or score points

2:30 - 2:45 **Break**

2:45 – 3:15 **Preparation for Final Judgments**

- Evaluation forms
- Questions, reminders, wrap-up/thanks

3:15 – 4:30 **Final Round of Judgments & Evaluation**

- Panelists depart as they finish work and turn in all materials and their evaluation forms

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20 March 2007

TO: Peggy Dutcher, OEAA TAC

FROM: Mike Beck

RE: Plans for *MI-Access* Standard Setting Activities for May, 2007
Participation & Supported Independence v1.5 Assessments

Following are proposals for the standard-setting activities to be conducted for *MI-Access* Participation and Supported Independence v 1.5 assessments on May 2 and 3.

Participation & Supported Independence v1.5 (P/SI)

Because of the change in the assessment structure for these two components of Michigan's assessment system for the 2006-2007 school year, it is necessary to reset the standards that were established in 2005. Specifically, the current v 1.5 assessments are comprised of an English language Arts and a Mathematics assessment, for which separate sets of performance standards are required. We recommend:

- Four panels – each composed of 10-12 panelists. The panels will work on the following assessments/grade levels:
  Participation v1.5 – English Language Arts (ELA) – Grades 3-8, 11
  Participation v1.5 – Mathematics – Grades 3-8, 10
  Supported Independence v1.5 – ELA – Grades 3-8, 10
  Supported Independence v1.5 – Mathematics – Grades 3-8, 11

Sessions will be led by Beck, Potter, Caswell, and Straley. All except Straley facilitated previous *MI-Access* SS activities; Straley has observed the two most recent (2005 and 2006) *MI-Access* standards-setting sessions and is intimately familiar with the assessments. BETA will also provide two data analysts – Pardue and Stock. Alison Place, MI-Access Contract Manager, will be present for the entire session to handle logistics issues.

Up to one-half of each panel should be participants in an earlier standard-setting (SS) session for these assessments; others should be new participants. Panelists should preferably not have been members of CAC, SRC, or related item-development or -review committees. No more than roughly 3/4 of the panelists should be active special-education professionals; OEAA needs to decide the appropriate proportions and the others to be involved – parents, advocacy groups, business personnel, etc.

To provide appropriate background information, we should provide or refer the panelists in advance for their review:

- A document showing the alignment of the *MI-Access* v 1.5 assessments o the state EGLCs,

- Background information about how the *current* standards were established, including definitions of the performance labels,
- Information concerning the change in the content of the instrument for the 2006-2007 year.
- Background information on how *MI-Access* P/SI assessments are
    - "scored" and information concerning the
    - double-scoring process introduced with the v1.5 assessments.

Panels will use the same performance labels as have been used with previous *MI-Access* sessions – *Emerging toward the Standard, Attained the Performance Standard*, and *Surpassed the Performance Standard*. Panelists will obviously be presented with, and thoroughly discuss, the OEAA-approved *MI-Access* grade-range performance-level descriptors (PLDs) for each performance label to guide their work. The first draft of the PLDs for the *MI-Access* v1.5 assessments have already been provided to BETA by OEAA; we assume that additional revisions to these drafts will be made prior to May. The outcomes of this effort will be provided to the standard-setting panels as an initial starting point for their work. Panels will be able to make appropriate, though minor, revisions in these descriptors.

All standards-setting sessions will involve three rounds of panel recommendations, consistent with the procedures used for previous *MI-Access* work of this type, as well as with the MEAP procedures. Between the first and second rounds of the panels' work, panels will be given activity-difficulty data for their consideration. These data will be based on the just-completed Spring, 2007 statewide administration of the assessments. Prior to the last round of ratings for the sessions, panelists should see statewide impact data for the assessments as they are constituted. Such data were provided for the original P/SI assessment sessions. We will also share – prior to the first, second, or third round, as OEAA decides -- statewide results (percent scoring in each performance category) for the *original* versions of the Participation and Supported Independence forms as an "anchor" for the panelists.

We will attempt to replicate as closely as possible the methodological procedures and specific activities used in 2005 and 2006 to set the current performance standards for these assessments. That procedure involved essentially an item-mapping methodology in which *MI-Access* activities were arrayed according to task difficulty in a sequenced booklet, with panelists indicating the location in the ordered booklet at which minimally "meets standards" and other categories of students/test takers would be just-more-likely-than-not to perform. Task-difficulty data were provided to panels prior to the second round of judgments; statewide impact data were provided prior to the final round of judgments.

Each panel will review and recommend standards by grade for a single content area (ELA or Mathematics) for Grades 3, 4, 5, 6, 7, 8, and 11. This will require the review of tasks in three booklets – 30 total tasks across grades for the Participation v1.5 assessments, 45 total tasks for each content area of Supported Independence v1.5. While this is not a trivial amount of information to consider and judge, we believe that this activity can be comfortably completed in the two-day period set aside for the process.

Panelists will clearly be told that their work is purely advisory to OEAA, which will then propose standards to the Superintendent and state board.

Responsibilities: BETA/TASA will make all logistics arrangements, including assistance as requested by OEAA with the solicitation of potential panelists. OEAA's responsibilities will be to recommend panelists (approaching some directly as indicated) and to approve the general procedures and, as details firm, the scripts for the sessions.

In order to meet the time constraints of the sessions, which are scheduled only a few weeks following the assessment window, TASA will produce the pages of the 12 "bookmark" books well in advance of the assessment window's close. Item pages will simply be sequenced in difficulty order upon completion of the data analysis. The 12 required sequenced books are as follows:

Participation v1.5 ELA: Elementary, Middle-School, Grade 11
Participation v1.5 Math: Elementary, Middle-School, Grade 11
Supported Independence v1.5 ELA: Elementary, Middle-School, Grade 11
Supported Independence v1.5 Math: Elementary, Middle-School, Grade 11

Each sequenced book will contain 60 ordered pages. The Participation ELA and mathematics assessments each contain 10 items, each scored from 0 through 6, for a total possible raw score of 60. The Supported Independence v1.5 assessments contain 15 items, each scored from 0 through 4, again for a total possible score of 60.

Since items for selected grades are identical, these books will be sequenced by difficulty for the "combined-grade" sample, with single booklets required for Grades 3-5 and for Grades 6-8. Obviously, while the items at these grade pairs are identical, the item ordering if done by grade could have been somewhat different.

Based on TAC counsel, BETA will prepare a handout for panelists of task difficulty values for the combined-grade sample, as well as (perhaps) the comparable values *grade-by-grade*. While the booklets will be sequenced according to the combined-grades data, panelists will be able to check the data – and any irregularities in task difficulty by grade – should they wish. These data will be provided to panelists prior to Round 2, at the same time *p*-values were shared with previous *MI-Access* and MEAP panels.

The proposed detailed agendas (see attachment A) for the sessions described above. These agendas are subject to additional OEAA and contractor review and revision, but they convey the essential elements of the proposed sessions.

Panel sessions will be conducted in Lansing on May 2 and 3; on May 7, we propose a conference call with the state TAC to discuss the outcomes and panel recommendations, along with indicated smoothing across grades. The state Board of Education meeting is scheduled for May 8 to review and approve the standards. Reporting of results is scheduled to begin the following week.

Upon OEAA and TAC approval of these preliminary plans for these activities, BETA will prepare facilitator scripts and a project budget for the approved activities. To the extent possible, scripts will be kept comparable to those used for previous *MI-Access* standards-setting activities.

Appendix D: MI-Access Committee Application

MI-Access Committee Application

MICHIGAN Department of Education

MI Access™ Michigan's Alternate Assessment Program

Personal Information

Name _____ Phone: _____

District/School _____ Work Address: _____

Role/Title _____ City: _____

Email: _____ State _____ Zip _____

I am most familiar with:

- ☐ General Education
- ☐ Special Education
- ☐ Both

Applicants Ethnicity: (needed for NCLB documentation)

- ☐ American Indian or Alaskan Native
- ☐ Asian or Pacific Islander
- ☐ Black, not of Hispanic origin
- ☐ Hispanic
- ☐ White, not of Hispanic origin
- ☐ Multiracial

Indicate your first and second choices of the committees you would like to be considered for participation		**Please indicate the content areas you are most familiar with**	
1st Choice	2nd Choice	1st Choice	2nd Choice
☐ Content Advisory	☐ Content Advisory	☐ English Language Arts	☐ English Language Arts
☐ Sensitivity Review	☐ Sensitivity Review	☐ Mathematics	☐ Mathematics
☐ Assessment Plan Writing Team	☐ Assessment Plan Writing Team	☐ Science	☐ Science
☐ Standard Setting	☐ Standard Setting	☐ Social Studies	☐ Social Studies
☐ Rangefinding	☐ Rangefinding		

Please indicate which levels of MI-Access you are most familiar with		**Please indicate which grade levels you are most familiar with**	
1st Choice	2nd Choice	1st Choice	2nd Choice
☐ Participation	☐ Participation	☐ Elementary	☐ Elementary
☐ Supported Independence	☐ Supported Independence	☐ Middle School	☐ Middle School
☐ Functional Independence	☐ Functional Independence	☐ High School	☐ High School

Qualifications:
Please submit a seperate sheet indicating your qualifications ofor being consideredto participate on a MI-Access committee.

Please Mail or Fax the completed form along with the qualification page to:

Janet Lower
MDE/OEAA
PO Box 30008
Lansing MI 48909
Fax: 517-335-1186

MI-Access Committee Participation Application

Please type in a brief summary of your qualifications in the box below, this is REQUIRED in order to be CONSIDERED for participation on a MI-Access Committee: (If you need more space please print and add additional pages before faxing)

Appendix E: MI-Access Standard Setting Panelists

Key	
*	Previous Standard Setting Panelist
F	Female
M	Male
B	Black, not of Hispanic Origin
I	American Indian or Alaskan Native
M	Multiracial
W	White, not of Hispanic Origin
1	Northern Michigan
2	Southwest Michigan
3	East Michigan
4	Lower Southeast Michigan
5	Southeast Michigan

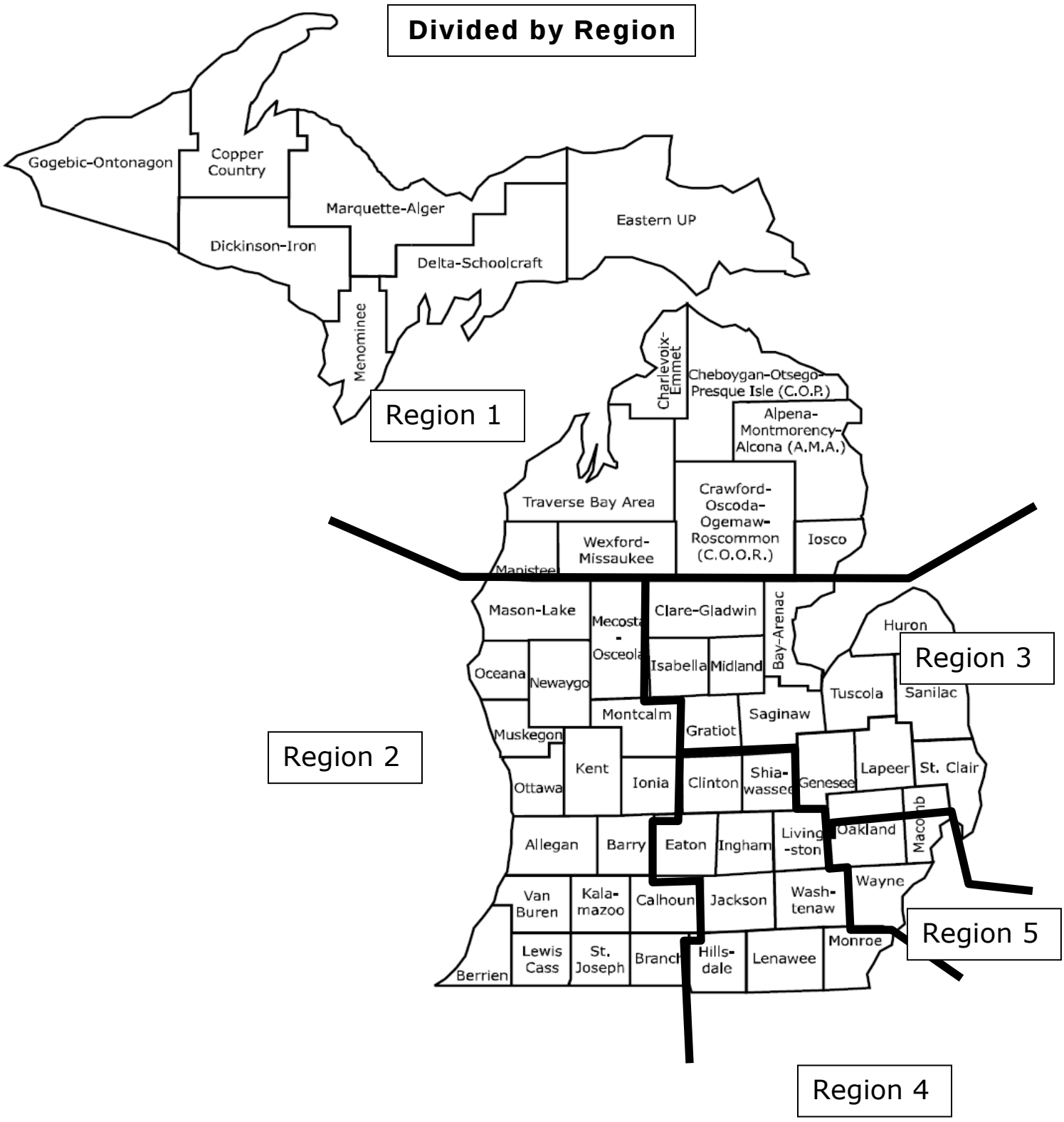
Name	Role	Gender	Ethnicity	Region	District
Participation v1.5 English Language Arts					
Tamara Allen	Para Professional/Parent	F	W	4	Eaton Rapids Public Schools
Tina Atkins*	Special Education Administrator Hearing and Visual Impairments English Language Learners	F	W	2	Kalamazoo RESA
Robin Hammond	Classroom Teacher Special Education	F	W	3	Midland Public Schools
Sandra House*	Classroom Teacher Special Education	F	W	3	Saginaw Public Schools
Helmi Lepisto*	Classroom Teacher Special Education and General Education Hearing Impairment English Language Learners	F	W	1	Menominee Area Public Schools
Jennifer McGuff*	Classroom Teacher Special Education English Language Learners	F	I	3	Carman-Ainsworth Community Schools
Mary McKay	Classroom Teacher Special Education English Language Learners	F	W	5	Northville Public Schools
Gail Mellas	Program Administrator	F	W	5	Wyandotte City School District

Amanda Miller	Classroom Teacher Special Education	F	W	3	Sandusky Community School District
Lisa Nielsen*	Classroom Teacher Special Education	F	W	2	Crossroads Charter Academy
Sue Nyce*	Classroom Teacher Special Education English Language Learners	F	W	2	Van Buren Intermediate School District
Kimberly Powers*	Coordinator Special Education	F	W	4	Fortis Academy
Stacie Sexton	Classroom Teacher Special Education	F	W	4	Monroe Intermediate School District
Peg Steeh*	Classroom Teacher Special Education	F	W	5	Bloomfield Hills School District
Brenda Vaughn*	Classroom Teacher Special Education and General Education	F	W	1	Crawford AuSable School District
Participation v1.5 Mathematics					
George Cole*	Teacher Consultant Special Education	M	B	3	Flint City School District
Delores Dolan*	Retired Classroom Teacher Special Education	F	W	1	Ishpeming Public Schools
Derrick Ford*	Classroom Teacher Special Education	M	B	5	West Bloomfield School District
Mary Greve	Classroom Teacher Special Education	F	W	4	Ionia Intermediate School District
Linda Jackson*	Classroom Teacher Special Education	F	B	5	Detroit Public Schools
Alice Kamps*	Classroom Teacher Special Education	F	w	2	Ottawa Area Intermediate School District
Elaine Kosloski*	Classroom Teacher Special Education and General Education	F	W	5	Detroit Public Schools
Sandra McClennen*	Retired Psychologist Visual Impairments	F	W	5	Eastern Michigan University
Patrick McDonald*	Classroom Teacher Special Education	M	W	5	Garden City Public Schools
Missy Post	Classroom Teacher Special Education	F	W	2	Fruitport Community Schools

Jennifer Shelton*	Assistant Principal Special Education	F	W	5	Macomb Intermediate School District
Cheryl Vinson Taylor*	Teacher Consultant/Inclusion Specialist	F	B	3	Saginaw Intermediate School District
Barbara Whitman*	MI-Access Building Coordinator	F	W	3	Flint Public Schools
Terry Williams*	Classroom Teacher Special Education	M	W	5	Jackson Intermediate School District
Supported Independence v1.5 English Language Arts					
Mary Bird*	Classroom Teacher Special Education	F	W	4	Mason Public Schools
Bobbi Bonetti*	Parent Advocate Hearing Impairments English Language Learners	F	W	1	Crystal Falls
Al Gaiss*	Superintendent/Principal	M	W	1	Bessemer Area School District
Cynthia George*	Classroom Teacher Special Education	F	W	2	Grand Rapids Public Schools
Gabrielle Grimaldi	Classroom Teacher Special Education	F	W	3	Midland Public Schools
Nicole Lafata*	Classroom Teacher Special Education and General Education	F	W	5	West Bloomfield School District
Sharon Moore*	Transition Specialist	F	B	5	Detroit Public Schools
Anne O'Connor*	Classroom Teacher Special Education English Language Learners	F	W	5	Richmond Community Schools
Kathlyn Parker*	Assistant Professor Special Education English Language Learners	F	W	5	Eastern Michigan University
Ruth Rivera Gaiss*	Parent/Substitute Teacher Special Education and General Education English Language Learners	F	H	1	Bessemer Area School District
Sharon Simeon	Classroom Teacher Special Education	F	M	3	Flint Community School District
Eileen Switzer-Georgia*	Teacher Consultant/Special Classroom Teacher Special Education	F	W	3	Port Huron Area School District
Henry Tyszka*	Classroom Teacher Special Education English Language Learners	M	W	5	Garden City School District

Linda Verhagen*	Classroom Teacher Special Education	F	W	2	Rockford Public Schools
Supported Independence v1.5 Mathematics					
Deborah Belavek	School Psychologist Hearing and Visual Impairments	F	W	5	Oakland Public Schools
Lisa Brehmer*	Classroom Teacher Special Education	F	W	2	Portland Public School District
Sheryl Covington*	Classroom Teacher Special Education	F	B	5	Detroit Public Schools
Cheryl Gilbert*	Classroom Teacher Special Education	F	W	3	Birch Run Area Schools
Cindy Huussen*	Classroom Teacher Special Education	F	W	4	Jonesville Community Schools
Deborah Kwaiser	Classroom Teacher Special Education	F	W	3	Saginaw Township Community Schools
Mary Meldrum*	Classroom Teacher Special Education	F	W	5	Macomb Intermediate School District
Kristine Meyers	Special Services Supervisor	F	W	2	Rockford Public Schools
Angela Rovnan*	Classroom Teacher Special Education	F	W	5	Wyandotte City School District
Beverly Schumer*	Professor Special Education and General Education	F	W	3	University of Michigan
Monica Sebastien-Kadie*	Classroom Teacher Special Education English Language Learners	F	B	4	Flint Community School District
Bridgit Sova*	Classroom Teacher Special Education	F	W	3	Midland Public Schools
Megan Tietema	Classroom Teacher Special Education English Language Learners	F	W	2	Grand Rapids Public Schools
Doug Vanderjaqt*	Dir. of Assessment & Accountability General Education	M	W	2	Rockford Public Schools
Janie Wreggelsworth	Classroom Teacher Special Education	F	B	3	Saginaw Township Schools

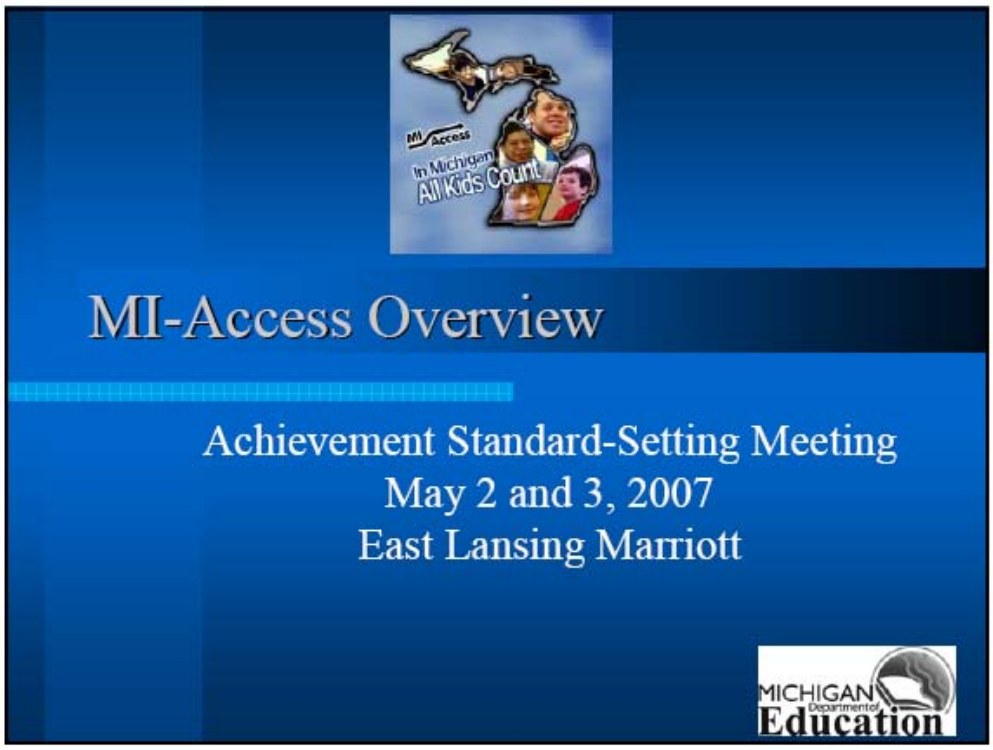
Appendix F: Michigan Intermediate School District Region Map

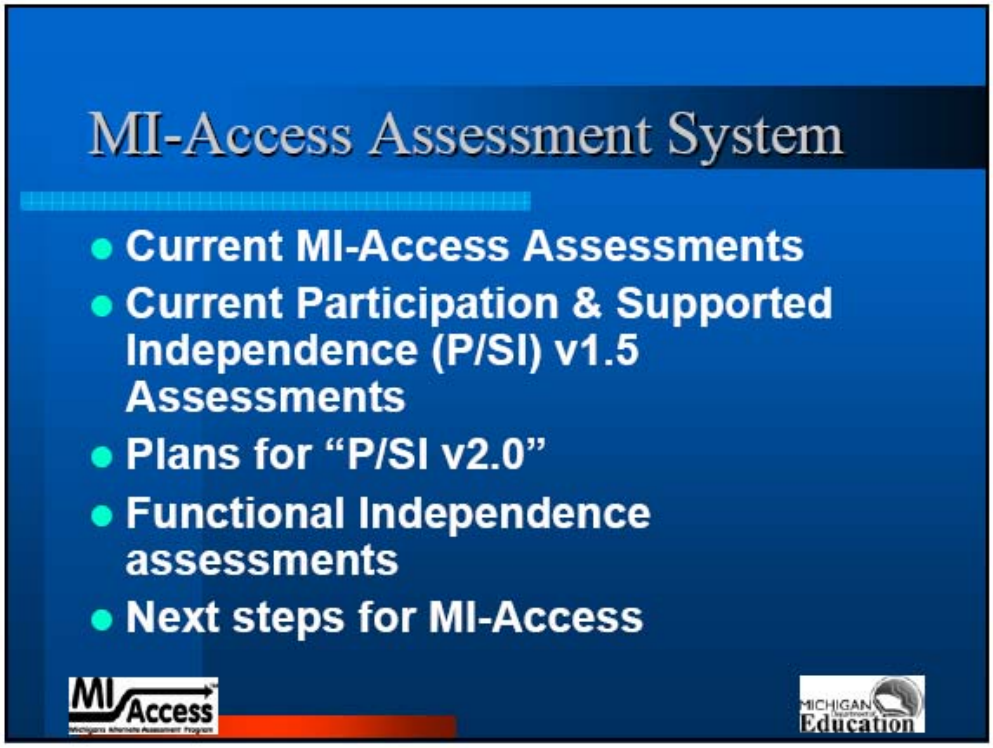


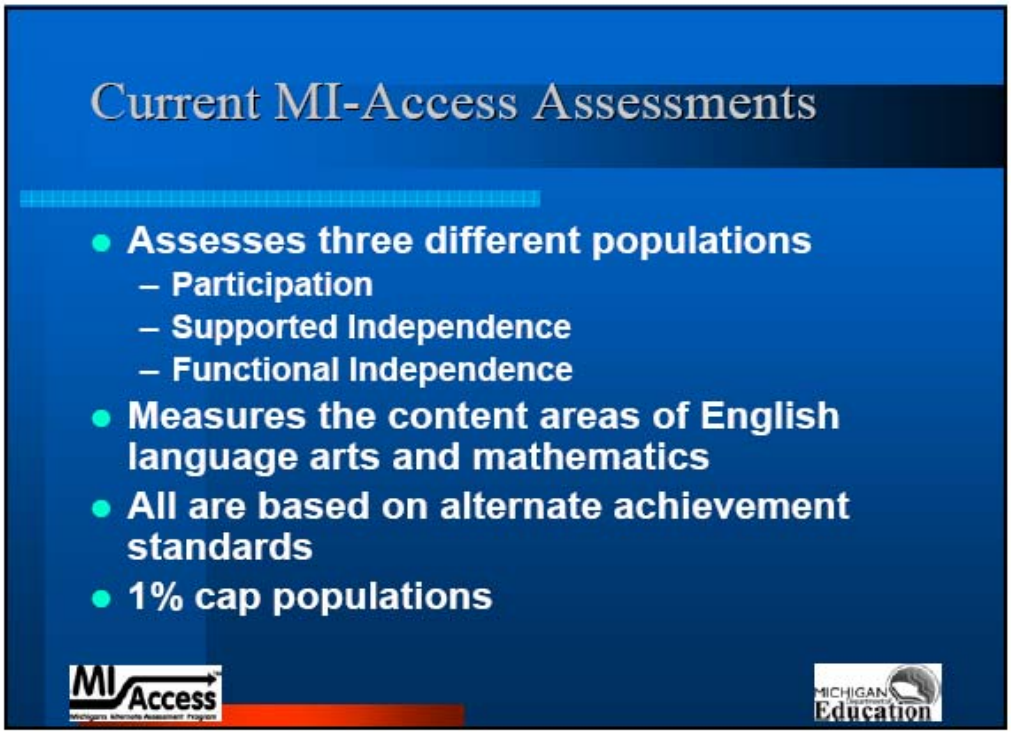
Appendix G: MI-Access Standard Setting Panel Facilitators

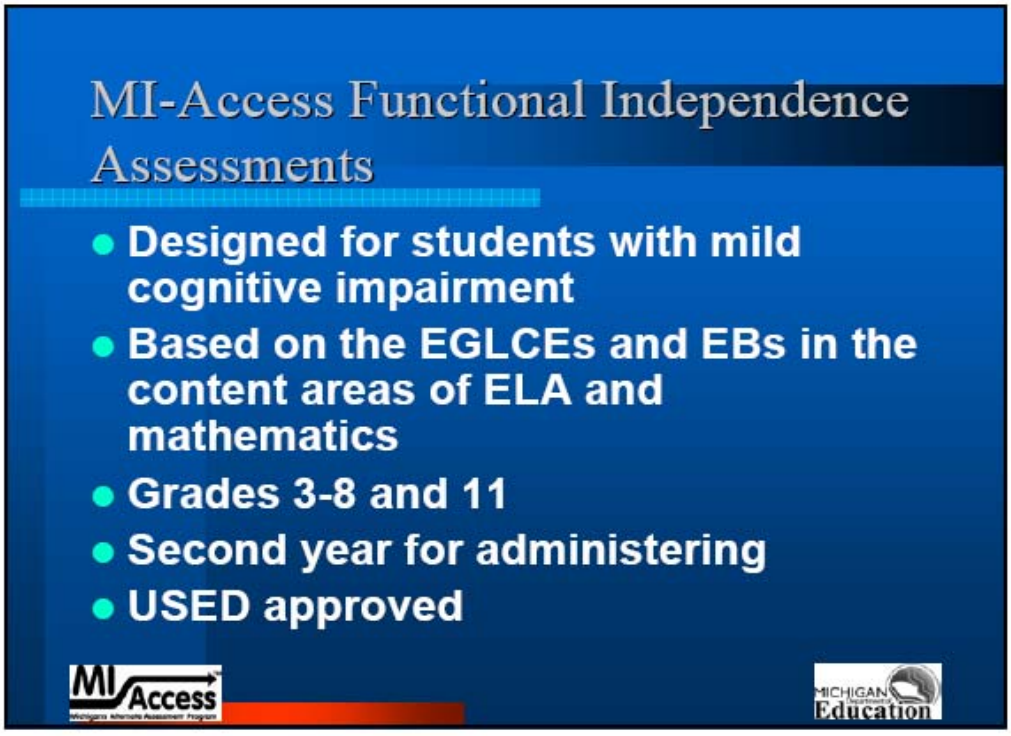
Name	Title	Contractor Conducting Standard Setting	Facilitated Group
Sheila Potter	Vice President. Curriculum Services	Questar Assessment Inc.	Participation v1.5 English Language Arts
Mike Beck	President, Beck Evaluation and Testing (BETA)	Questar Assessment Inc.	Participation v1.5 Mathematics
Linda Straley	Senior Vice President and Corporate Secretary	Questar Assessment Inc.	Supported Independence v1.5 English Language Arts
Martha Caswell	Vice President	Questar Assessment Inc.	Supported Independence v1.5 Mathematics

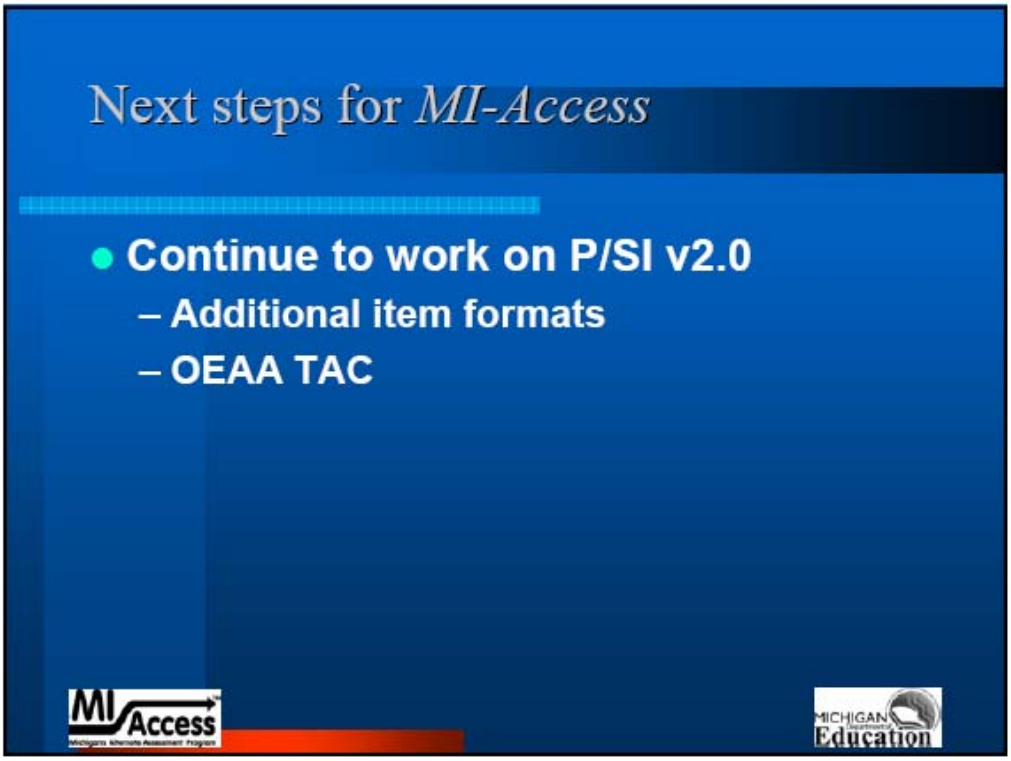
Appendix H: Overview of the MI-Access Instruments and Their Scoring

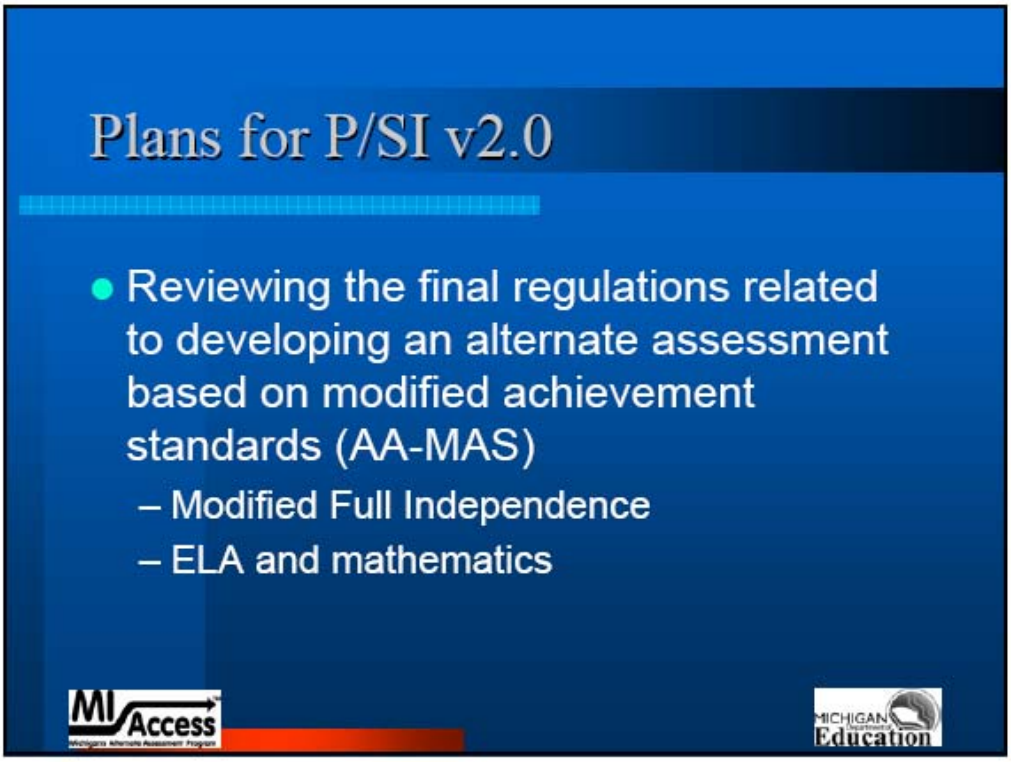


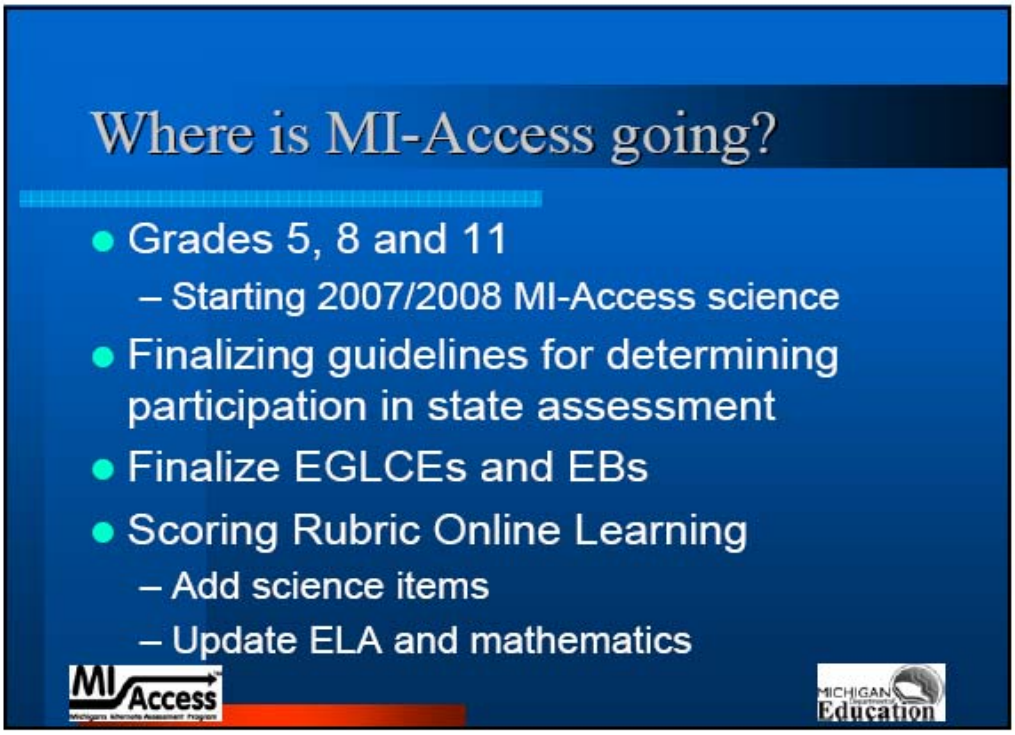


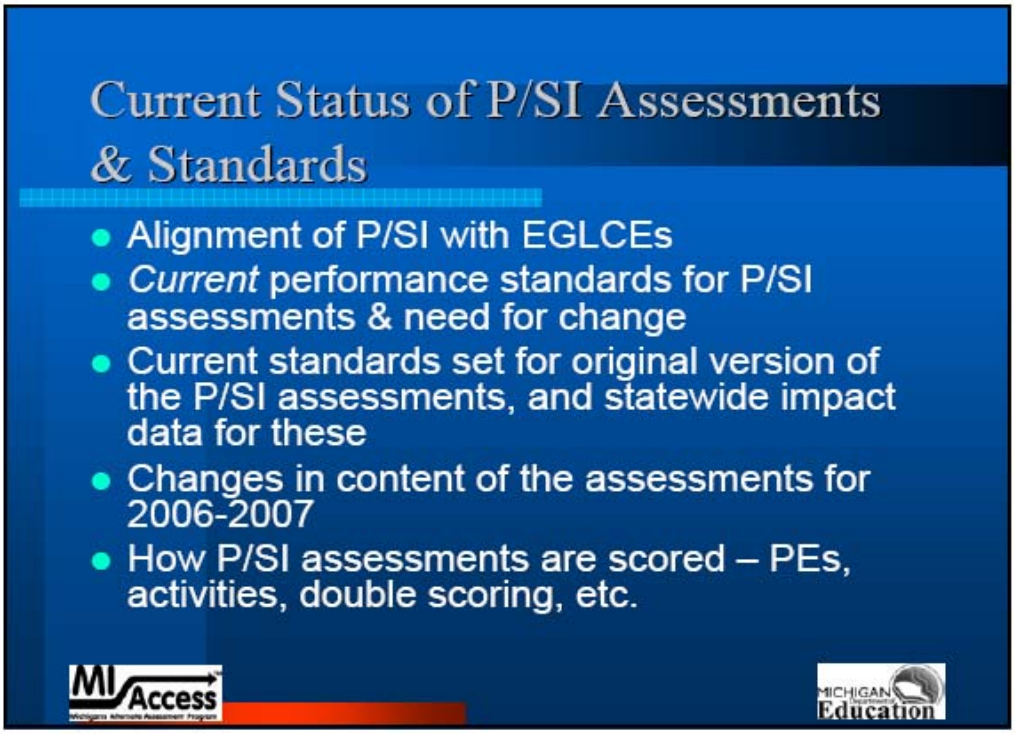

Current MI-Access Assessments
Assesses three different populations
– Participation
– Supported Independence
– Functional Independence
Measures the content areas of English language arts and mathematics
All are based on alternate achievement standards
1% cap populations
MI Access
MICHIGAN Department of Education

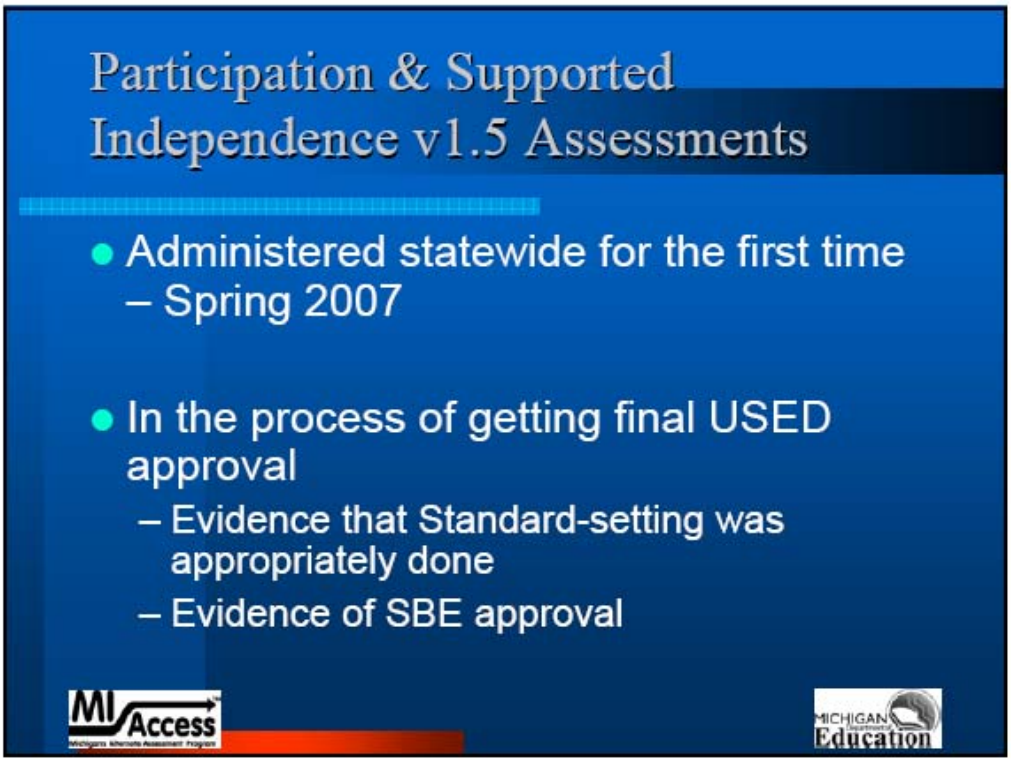

MI-Access Functional Independence Assessments
Designed for students with mild cognitive impairment
Based on the EGLCEs and EBs in the content areas of ELA and mathematics
Grades 3-8 and 11
Second year for administering
USED approved
MI Access
MICHIGAN Department of Education

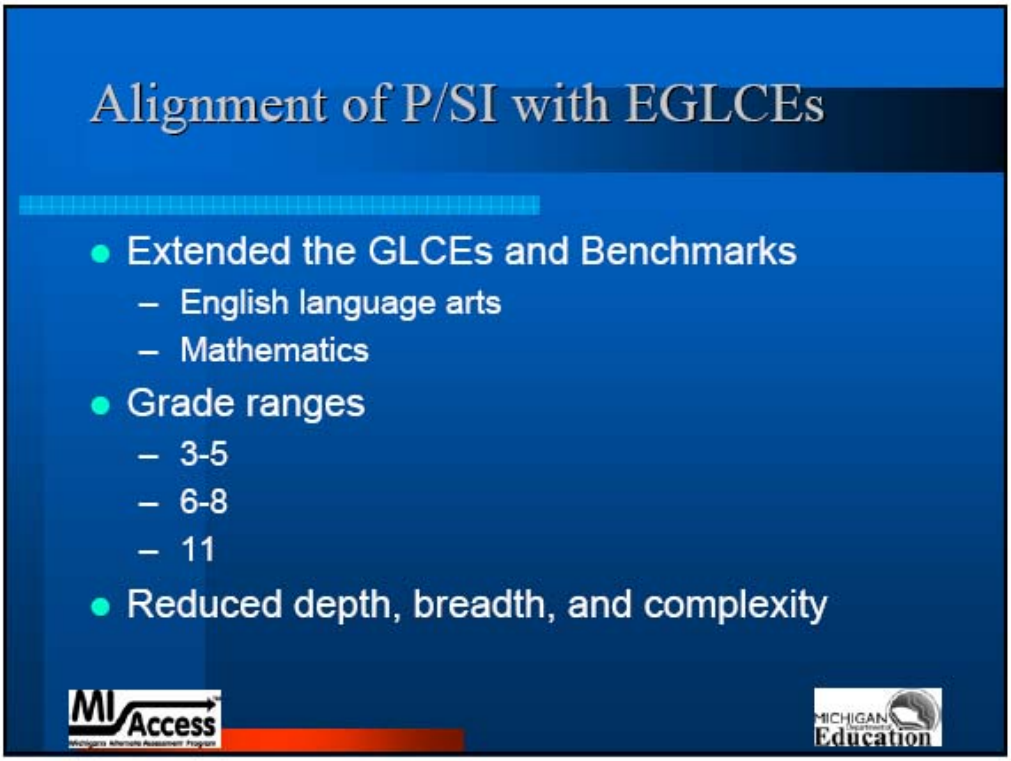

Next steps for *MI-Access*
Continue to work on P/SI v2.0
– Additional item formats
– OEAA TAC
MI Access
MICHIGAN Education


Plans for P/SI v2.0
Reviewing the final regulations related to developing an alternate assessment based on modified achievement standards (AA-MAS)
– Modified Full Independence
– ELA and mathematics
MI Access
MICHIGAN Education


Where is MI-Access going?
Grades 5, 8 and 11
– Starting 2007/2008 MI-Access science
Finalizing guidelines for determining participation in state assessment
Finalize EGLCEs and EBs
Scoring Rubric Online Learning
– Add science items
– Update ELA and mathematics
MI Access
MICHIGAN Education


Current Status of P/SI Assessments & Standards
Alignment of P/SI with EGLCEs
Current performance standards for P/SI assessments & need for change
Current standards set for original version of the P/SI assessments, and statewide impact data for these
Changes in content of the assessments for 2006-2007
How P/SI assessments are scored – PEs, activities, double scoring, etc.
MI Access
MICHIGAN Education

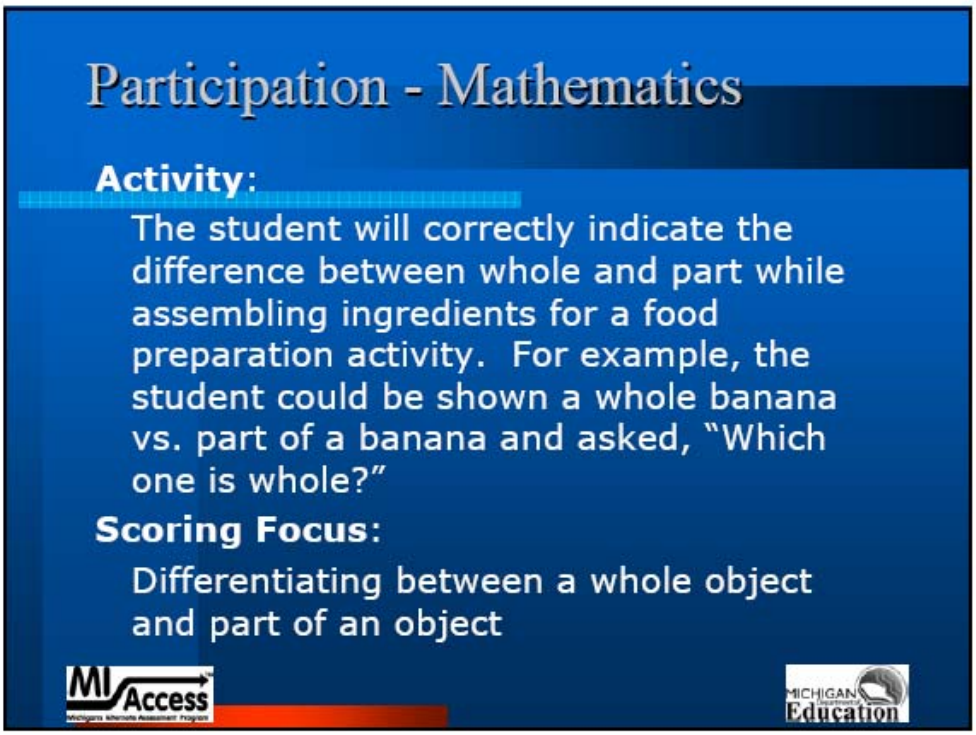

Participation & Supported Independence v1.5 Assessments
Administered statewide for the first time – Spring 2007
In the process of getting final USED approval
– Evidence that Standard-setting was appropriately done
– Evidence of SBE approval
MI Access
MICHIGAN Education

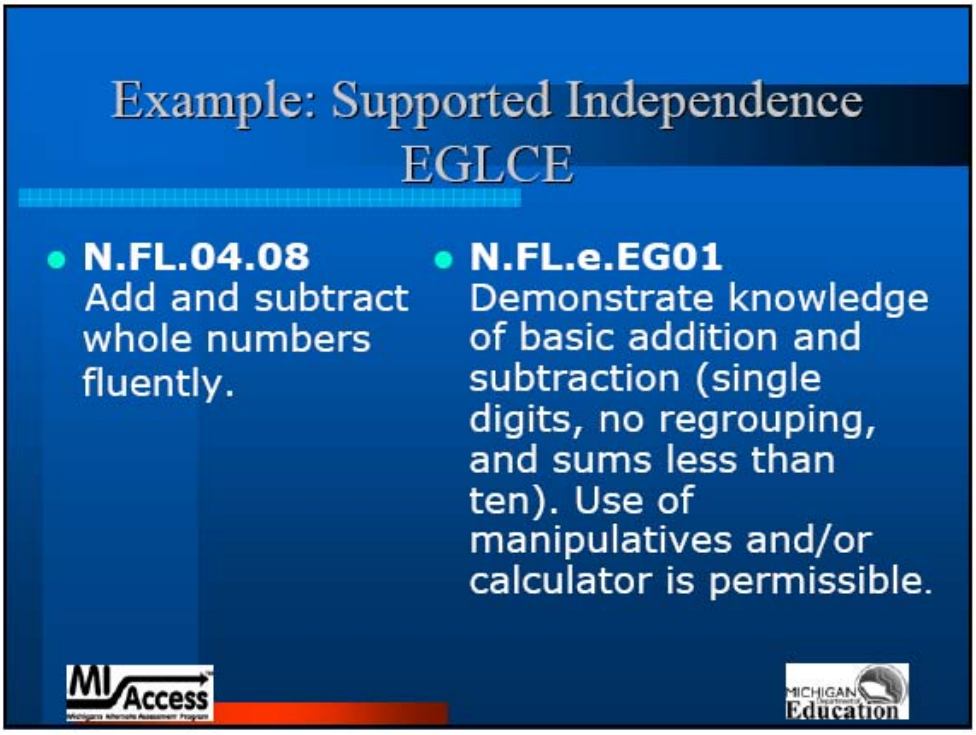

Alignment of P/SI with EGLCEs
Extended the GLCEs and Benchmarks
– English language arts
– Mathematics
Grade ranges
– 3-5
– 6-8
– 11
Reduced depth, breadth, and complexity
MI Access
MICHIGAN Education

Participation and Supported Independence v1.5 Mathematics

Example: Participation EGLCE

- **N.ME.04.20** Understand fractions as parts of a set of objects.
- **N.ME.e.EG04** Differentiate between whole objects and just part of an object. Example: Whole puzzle vs. one piece


Participation - Mathematics
Activity:
The student will correctly indicate the difference between whole and part while assembling ingredients for a food preparation activity. For example, the student could be shown a whole banana vs. part of a banana and asked, "Which one is whole?"
Scoring Focus:
Differentiating between a whole object and part of an object
MI Access
MICHIGAN Education


Example: Supported Independence EGLCE
N.FL.04.08 Add and subtract whole numbers fluently.
N.FL.e.EG01 Demonstrate knowledge of basic addition and subtraction (single digits, no regrouping, and sums less than ten). Use of manipulatives and/or calculator is permissible.
MI Access
MICHIGAN Education

Supported Independence Item

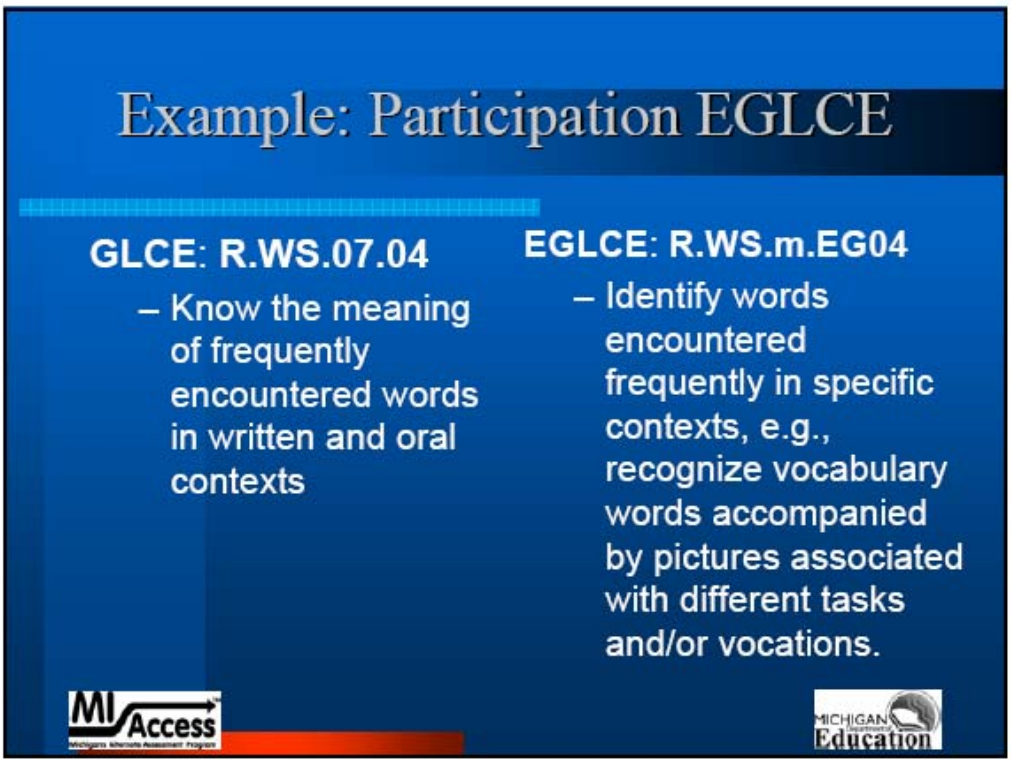
Activity:

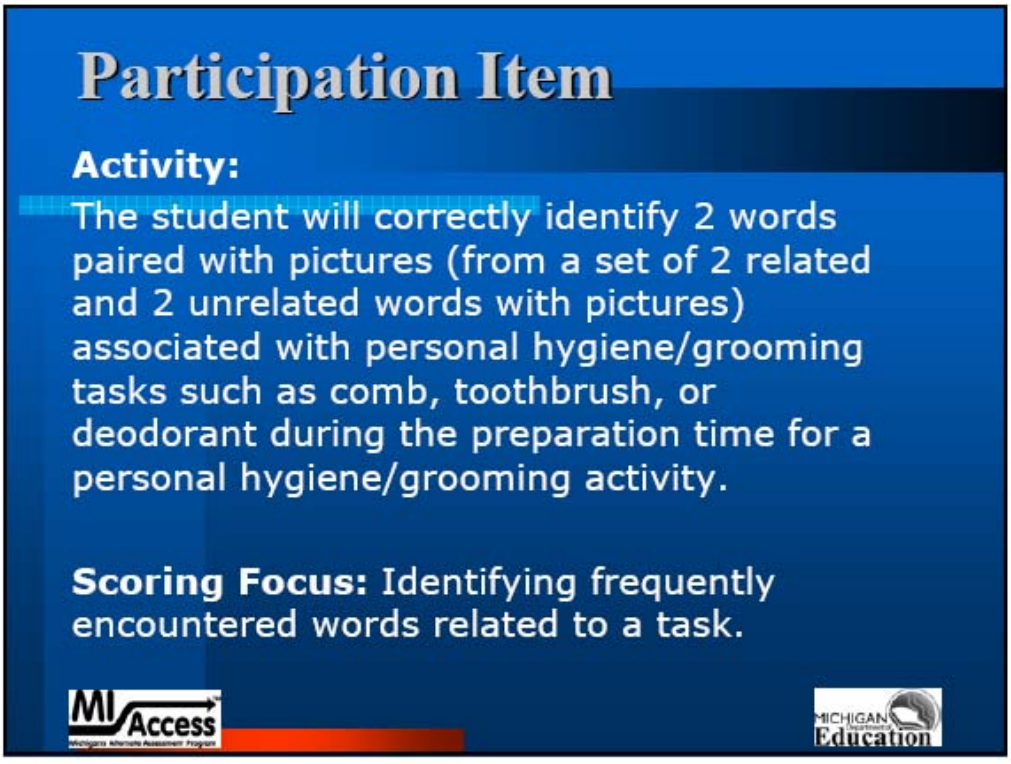
The student will correctly add 2 single digit numbers with a sum less than 10 during a familiar instructional activity. Use of calculators and/or manipulatives is permissible. For example, the student could be shown a set of 3 forks and another set of 4 forks and be asked, "How many forks are there in all?"

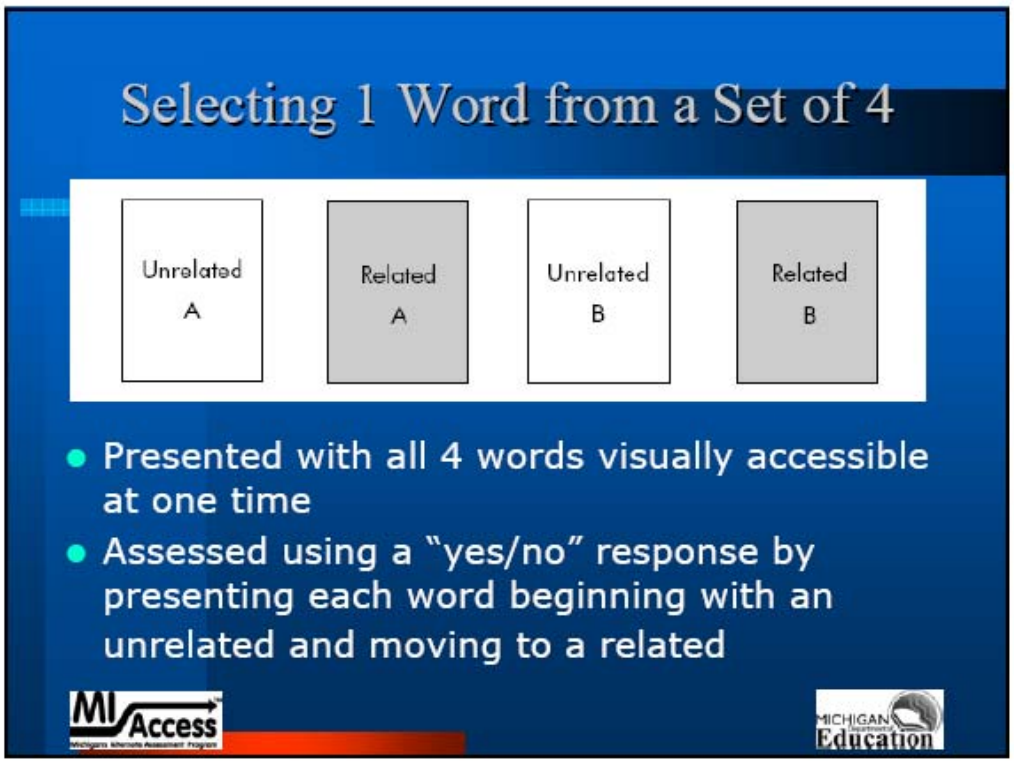
Scoring Focus:

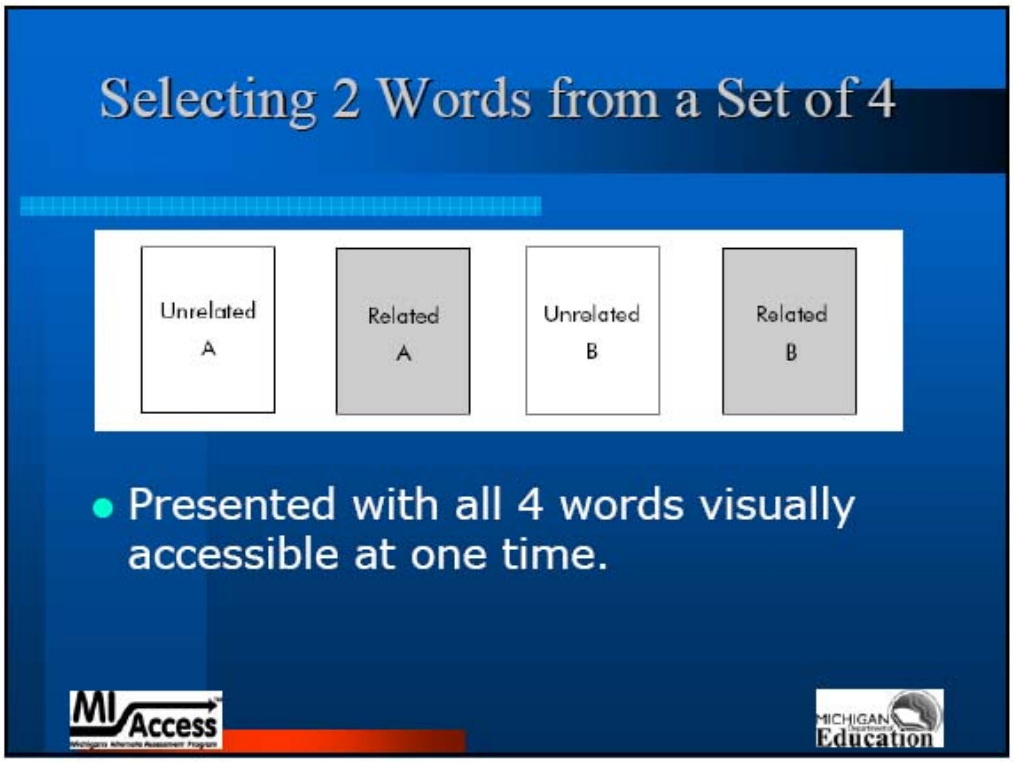
Demonstrating knowledge of basic addition

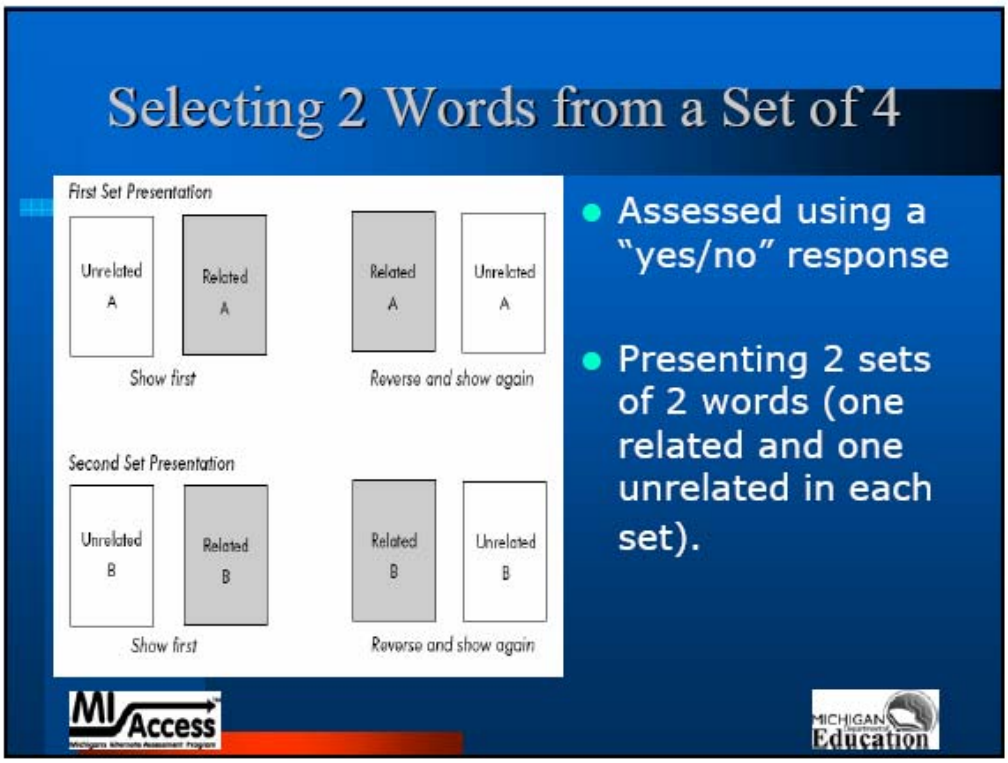
Participation and Supported Independence v1.5 English Language Arts

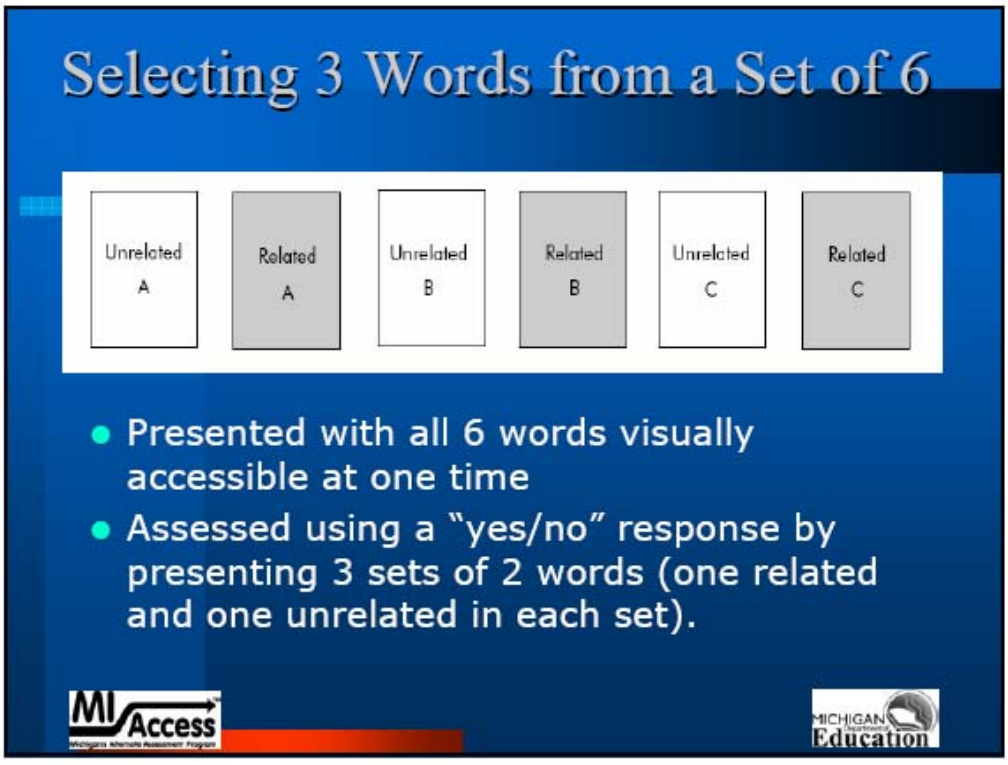

Example: Participation EGLCE
GLCE: R.WS.07.04
– Know the meaning of frequently encountered words in written and oral contexts
EGLCE: R.WS.m.EG04
– Identify words encountered frequently in specific contexts, e.g., recognize vocabulary words accompanied by pictures associated with different tasks and/or vocations.
MI Access
MICHIGAN Department of Education

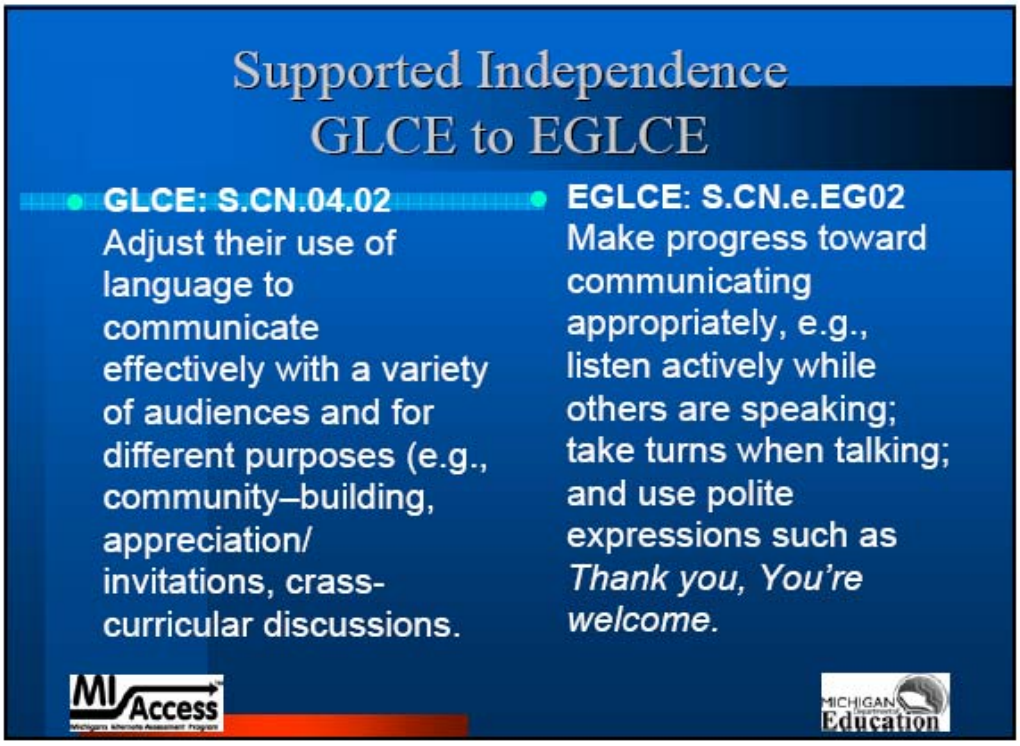

Participation Item
Activity:
The student will correctly identify 2 words paired with pictures (from a set of 2 related and 2 unrelated words with pictures) associated with personal hygiene/grooming tasks such as comb, toothbrush, or deodorant during the preparation time for a personal hygiene/grooming activity.
Scoring Focus: Identifying frequently encountered words related to a task.
MI Access
MICHIGAN Department of Education

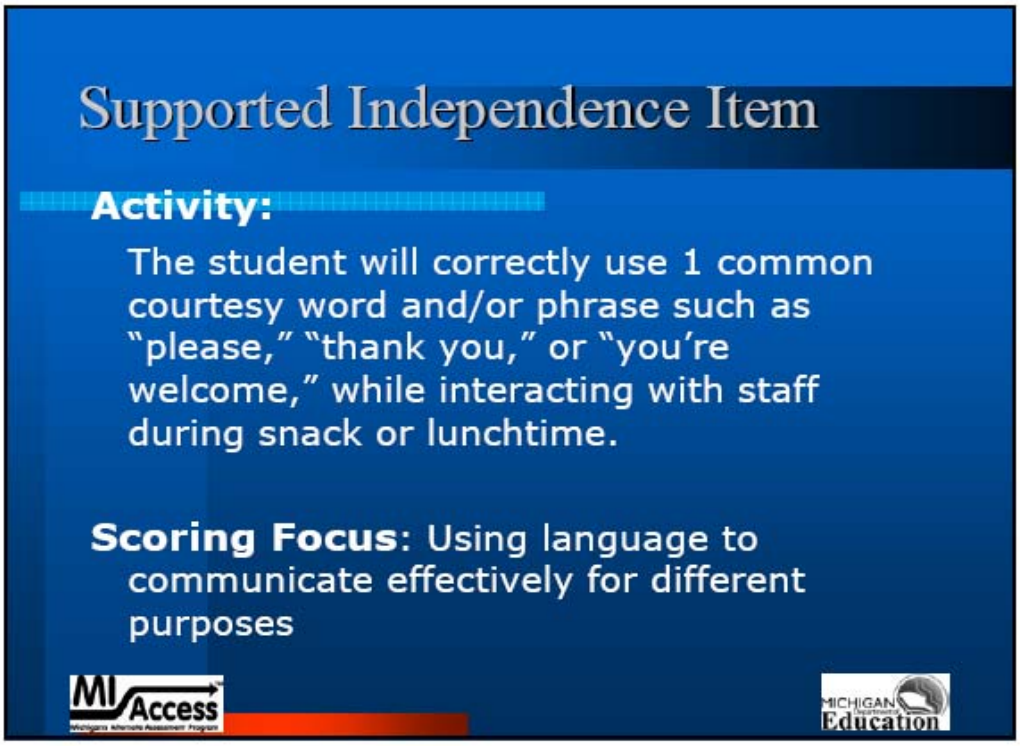

Selecting 1 Word from a Set of 4
Unrelated A
Related A
Unrelated B
Related B
Presented with all 4 words visually accessible at one time
Assessed using a "yes/no" response by presenting each word beginning with an unrelated and moving to a related
MI Access
MICHIGAN Department of Education

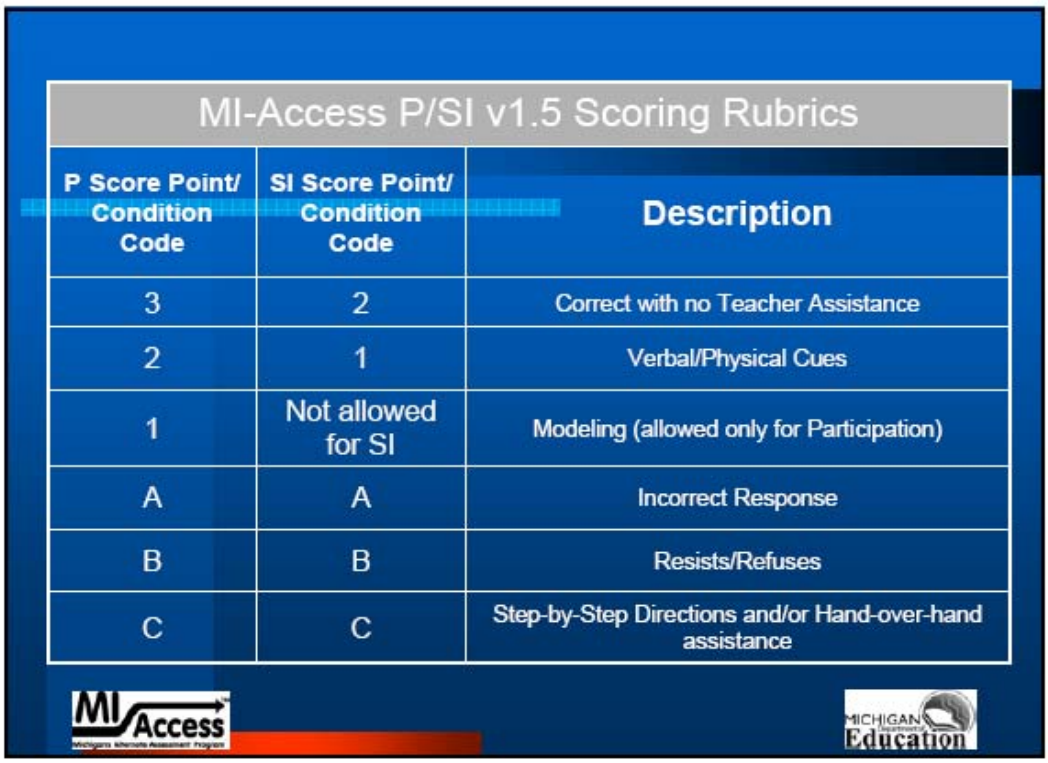

Selecting 2 Words from a Set of 4
Unrelated A
Related A
Unrelated B
Related B
Presented with all 4 words visually accessible at one time.
MI Access
MICHIGAN Department of Education

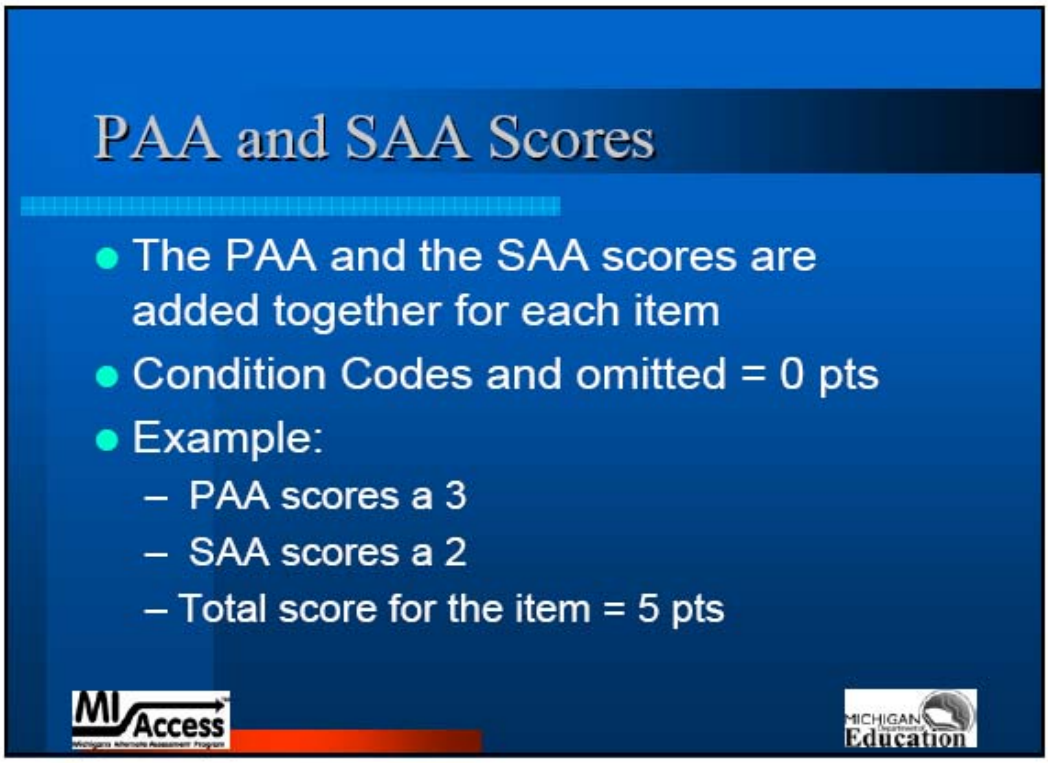

Selecting 2 Words from a Set of 4
First Set Presentation
Unrelated A
Related A
Show first
Related A
Unrelated A
Reverse and show again
Second Set Presentation
Unrelated B
Related B
Show first
Related B
Unrelated B
Reverse and show again
Assessed using a "yes/no" response
Presenting 2 sets of 2 words (one related and one unrelated in each set).
MI Access
MICHIGAN Education


Selecting 3 Words from a Set of 6
Unrelated A
Related A
Unrelated B
Related B
Unrelated C
Related C
Presented with all 6 words visually accessible at one time
Assessed using a "yes/no" response by presenting 3 sets of 2 words (one related and one unrelated in each set).
MI Access
MICHIGAN Education


Supported Independence
GLCE to EGLCE
GLCE: S.CN.04.02
Adjust their use of language to communicate effectively with a variety of audiences and for different purposes (e.g., community–building, appreciation/ invitations, crass-curricular discussions.
EGLCE: S.CN.e.EG02
Make progress toward communicating appropriately, e.g., listen actively while others are speaking; take turns when talking; and use polite expressions such as *Thank you, You're welcome.*


Supported Independence Item
Activity:
The student will correctly use 1 common courtesy word and/or phrase such as "please," "thank you," or "you're welcome," while interacting with staff during snack or lunchtime.
Scoring Focus: Using language to communicate effectively for different purposes


MI-Access P/SI v1.5 Scoring Rubrics
P Score Point/ Condition Code
SI Score Point/ Condition Code
Description
3
2
Correct with no Teacher Assistance
2
1
Verbal/Physical Cues
1
Not allowed for SI
Modeling (allowed only for Participation)
A
A
Incorrect Response
B
B
Resists/Refuses
C
C
Step-by-Step Directions and/or Hand-over-hand assistance
MI Access
MICHIGAN Education


PAA and SAA Scores
The PAA and the SAA scores are added together for each item
Condition Codes and omitted = 0 pts
Example:
PAA scores a 3
SAA scores a 2
Total score for the item = 5 pts
MI Access
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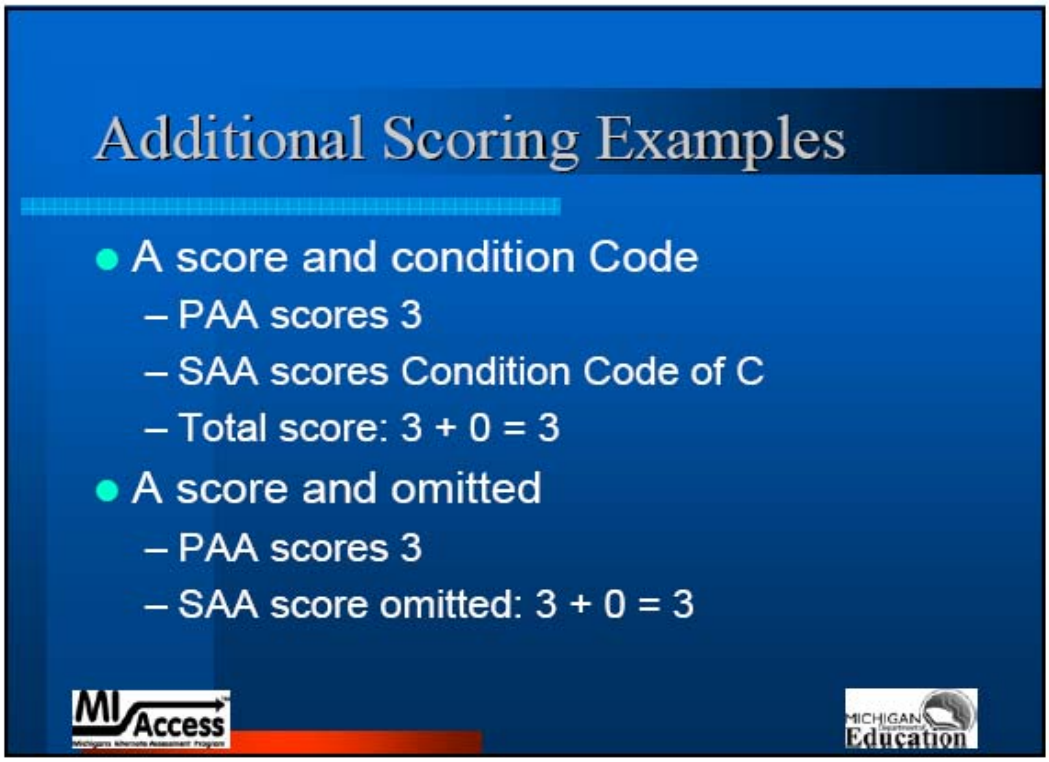
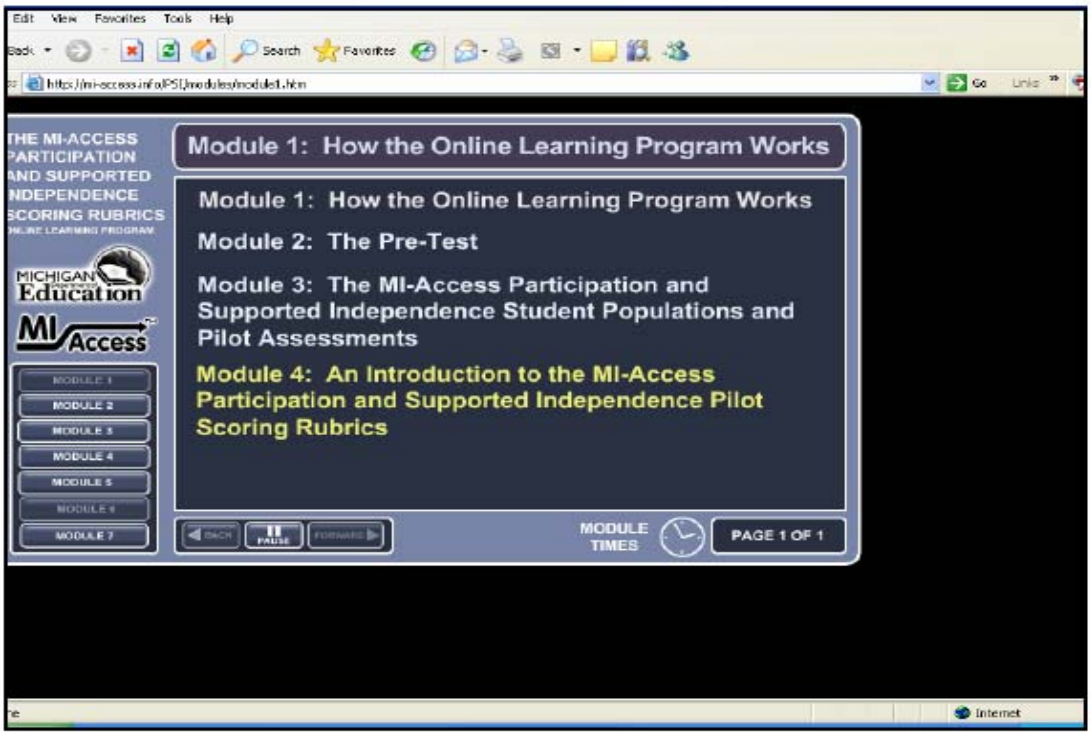
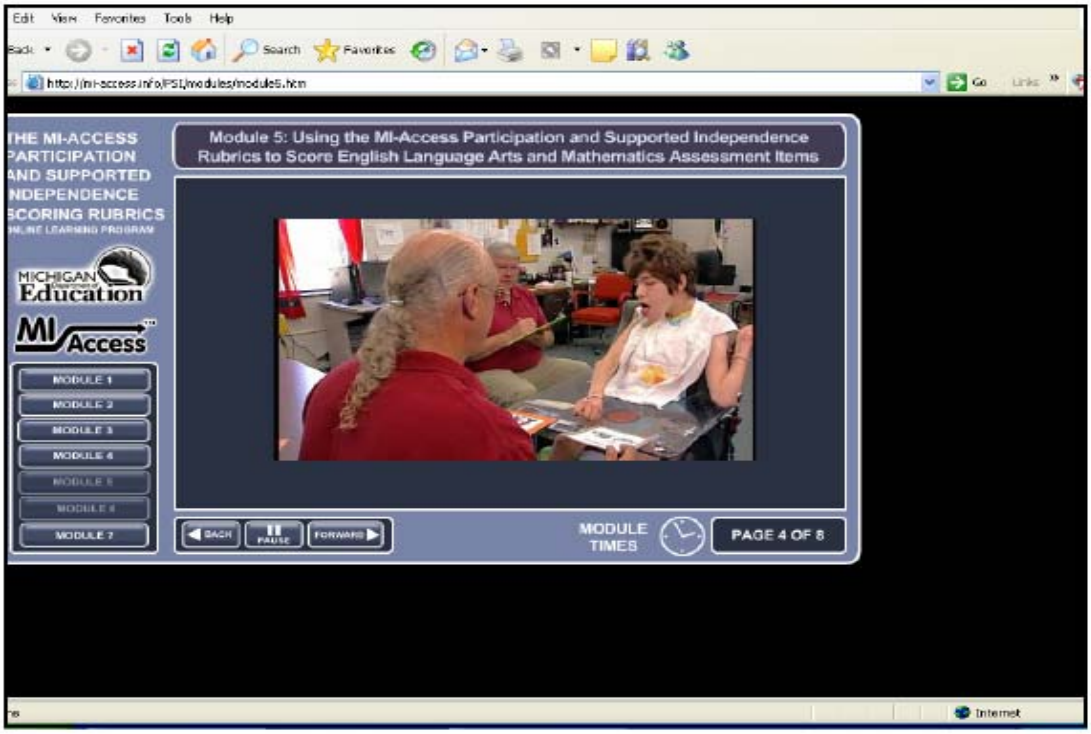

Additional Scoring Examples
A score and condition Code
– PAA scores 3
– SAA scores Condition Code of C
– Total score: 3 + 0 = 3
A score and omitted
– PAA scores 3
– SAA score omitted: 3 + 0 = 3
MI Access
MICHIGAN Education


Online Learning Program
MI-Access Participation and Supported Independence Scoring Rubrics Online Learning Program
www.mi-access.info
MI Access
MICHIGAN Education


Edit View Favorites Tools Help
Back Search Favorites
https://mi-access.info/PSI/modules/module1.htm
THE MI-ACCESS PARTICIPATION AND SUPPORTED INDEPENDENCE SCORING RUBRICS
ONLINE LEARNING PROGRAM
MICHIGAN Department of Education
MI Access
MODULE 1
MODULE 2
MODULE 3
MODULE 4
MODULE 5
MODULE 6
MODULE 7
Module 1: How the Online Learning Program Works
Module 1: How the Online Learning Program Works
Module 2: The Pre-Test
Module 3: The MI-Access Participation and Supported Independence Student Populations and Pilot Assessments
Module 4: An Introduction to the MI-Access Participation and Supported Independence Pilot Scoring Rubrics
BACK
PAUSE
FORWARD
MODULE TIMES
PAGE 1 OF 1
Internet


Edit View Favorites Tools Help
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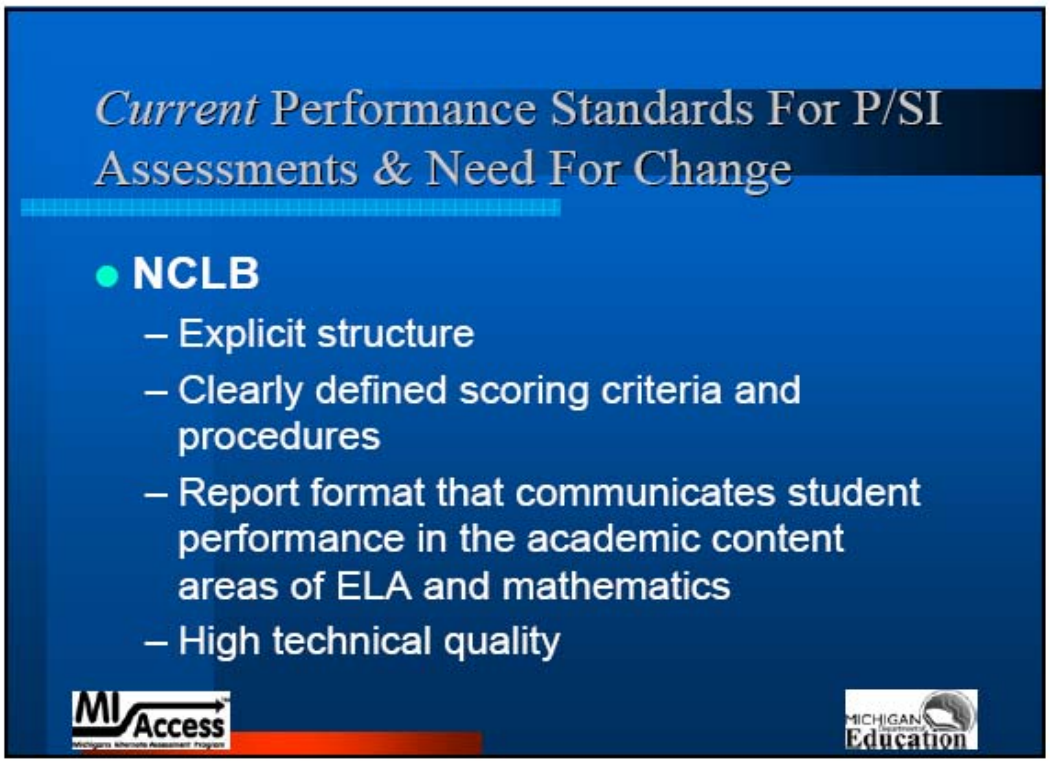
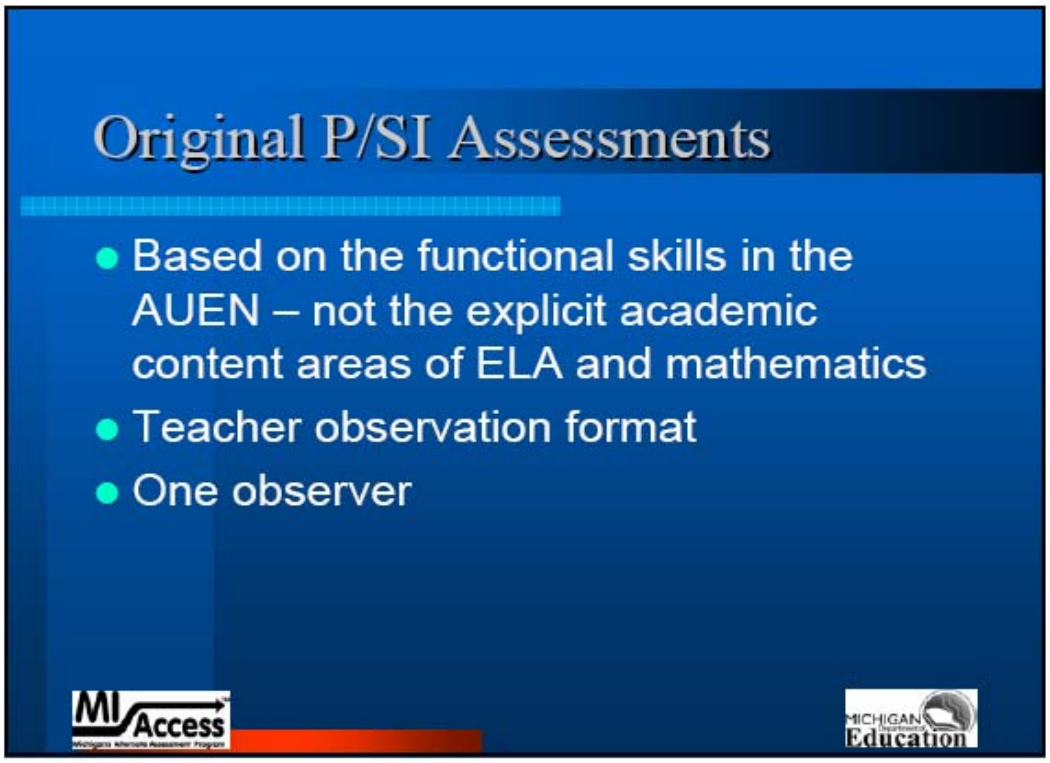
http://mi-access.info/PSI/modules/module5.htm
THE MI-ACCESS PARTICIPATION AND SUPPORTED INDEPENDENCE SCORING RUBRICS
ONLINE LEARNING PROGRAM
MICHIGAN Department of Education
MI Access
MODULE 1
MODULE 2
MODULE 3
MODULE 4
MODULE 5
MODULE 6
MODULE 7
Module 5: Using the MI-Access Participation and Supported Independence Rubrics to Score English Language Arts and Mathematics Assessment Items
BACK
PAUSE
FORWARD
MODULE TIMES
PAGE 4 OF 8
Internet


Current Performance Standards For P/SI Assessments & Need For Change
NCLB
– Explicit structure
– Clearly defined scoring criteria and procedures
– Report format that communicates student performance in the academic content areas of ELA and mathematics
– High technical quality
MI Access
MICHIGAN Education


Original P/SI Assessments
Based on the functional skills in the AUEN – not the explicit academic content areas of ELA and mathematics
Teacher observation format
One observer
MI Access
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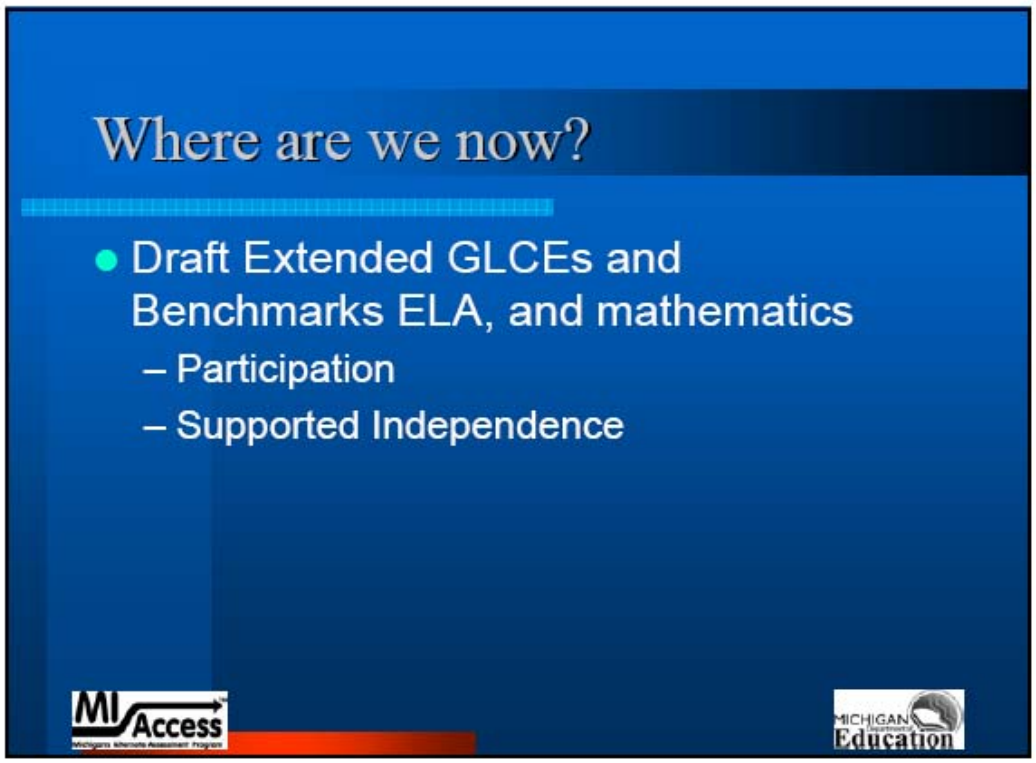
Where are we now?
Draft Extended GLCEs and Benchmarks ELA, and mathematics
– Participation
– Supported Independence
MI Access
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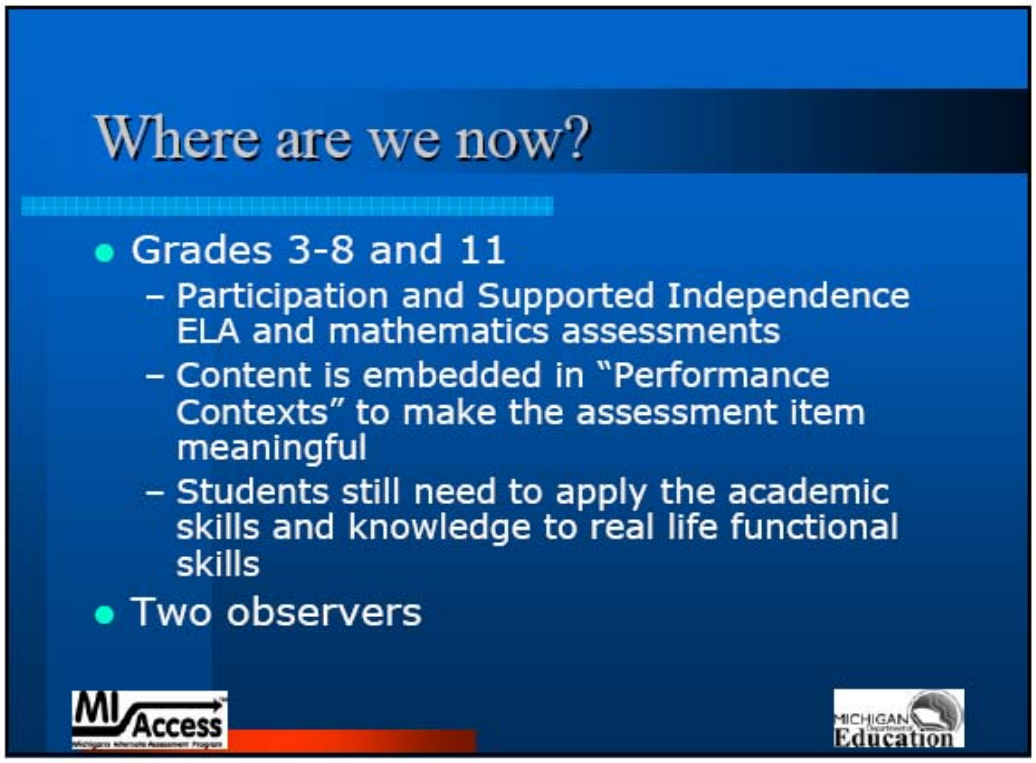
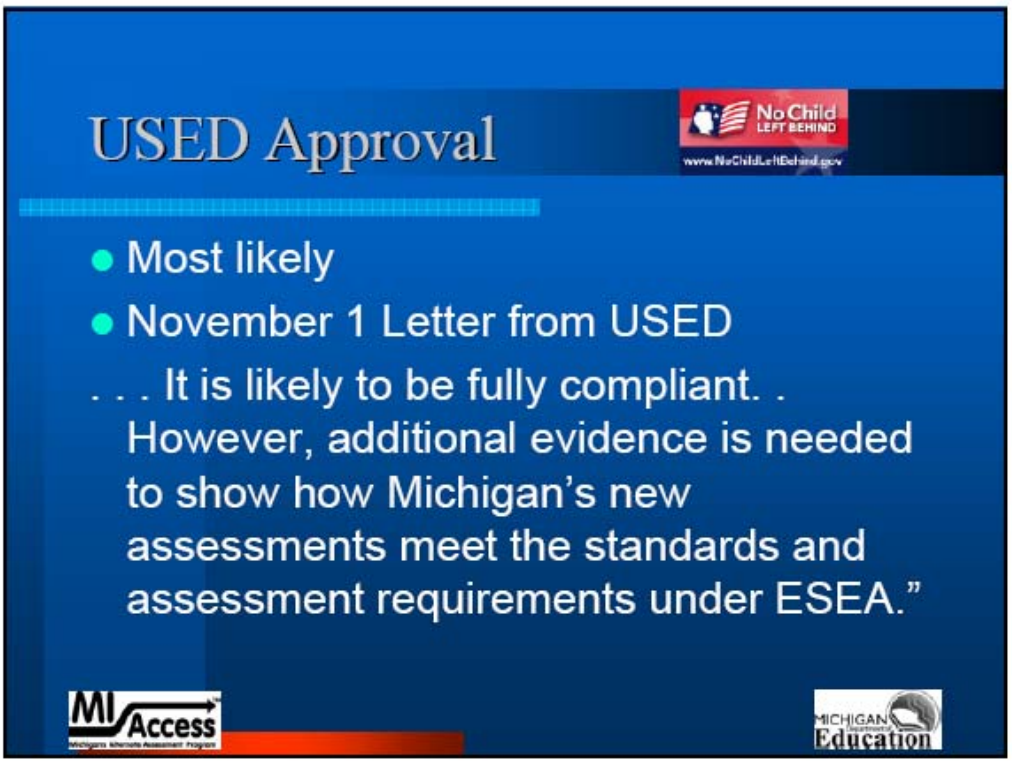
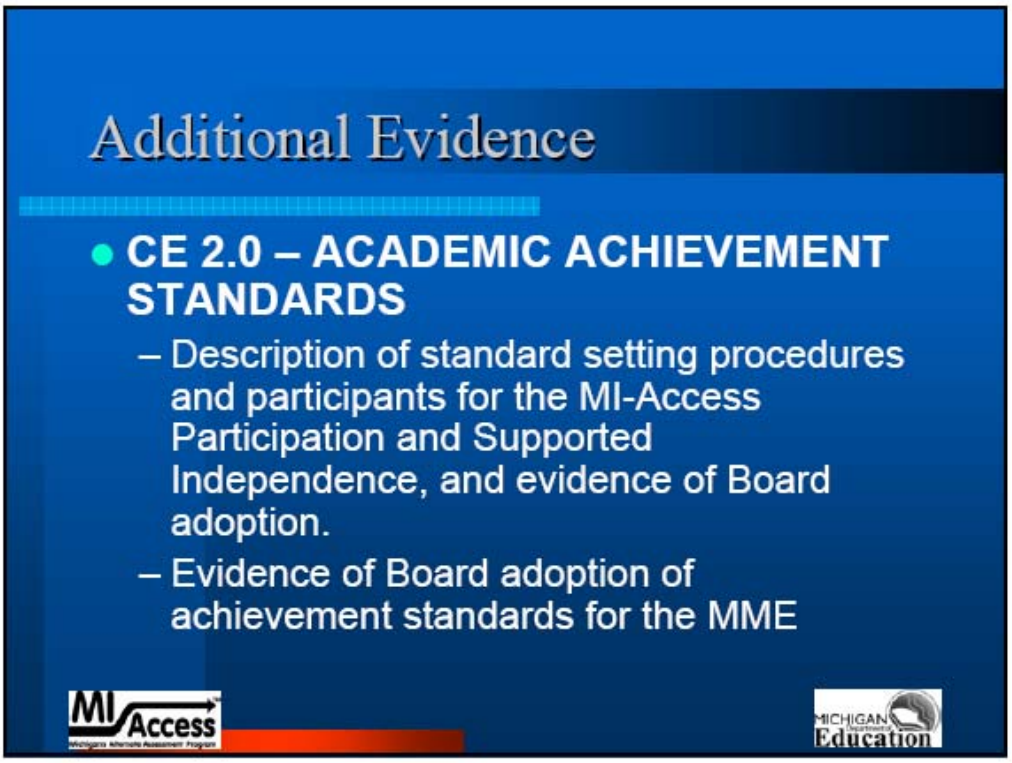
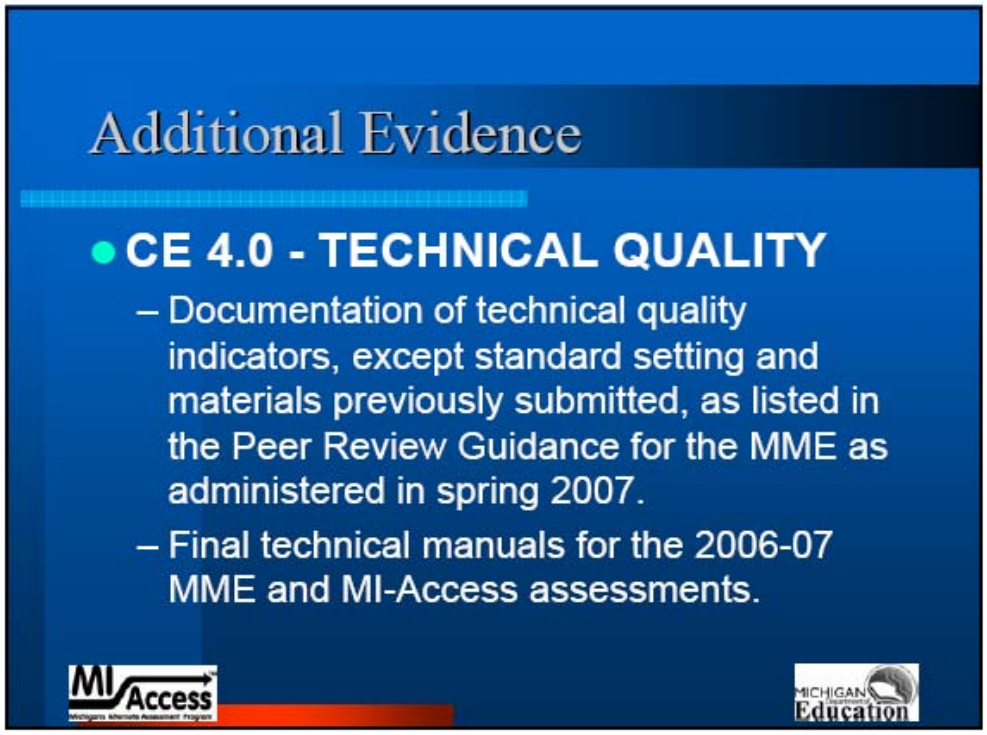
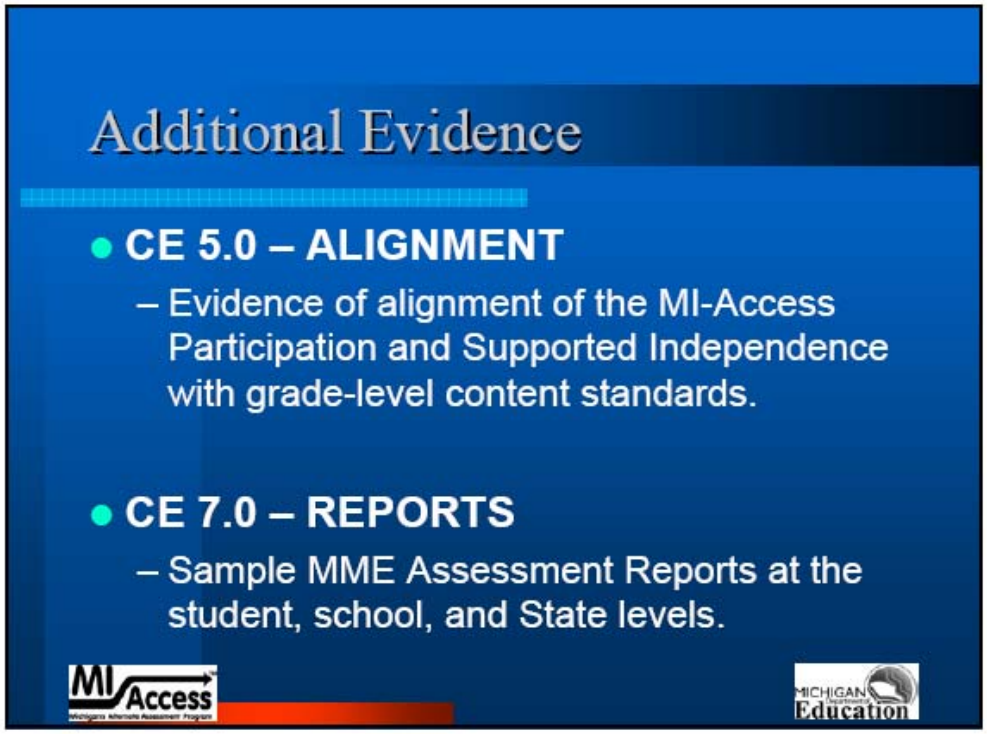

Where are we now?
Grades 3-8 and 11
– Participation and Supported Independence ELA and mathematics assessments
– Content is embedded in "Performance Contexts" to make the assessment item meaningful
– Students still need to apply the academic skills and knowledge to real life functional skills
Two observers
MI Access
MICHIGAN Education

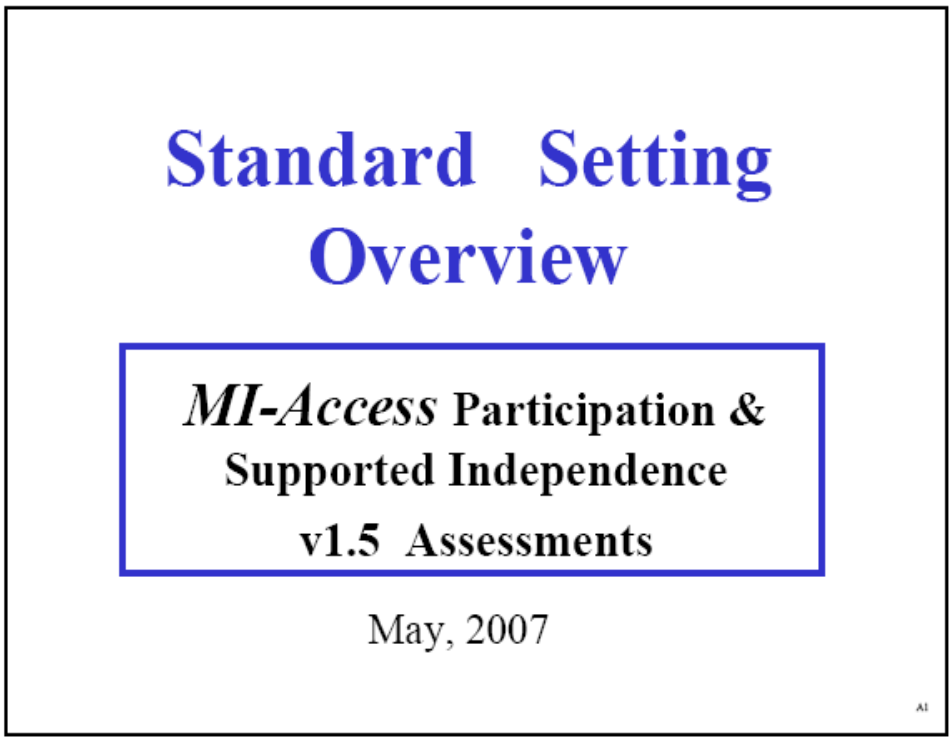

USED Approval
No Child Left Behind
www.NoChildLeftBehind.gov
Most likely
November 1 Letter from USED
. . . It is likely to be fully compliant. . However, additional evidence is needed to show how Michigan's new assessments meet the standards and assessment requirements under ESEA."
MI Access
Michigan Education

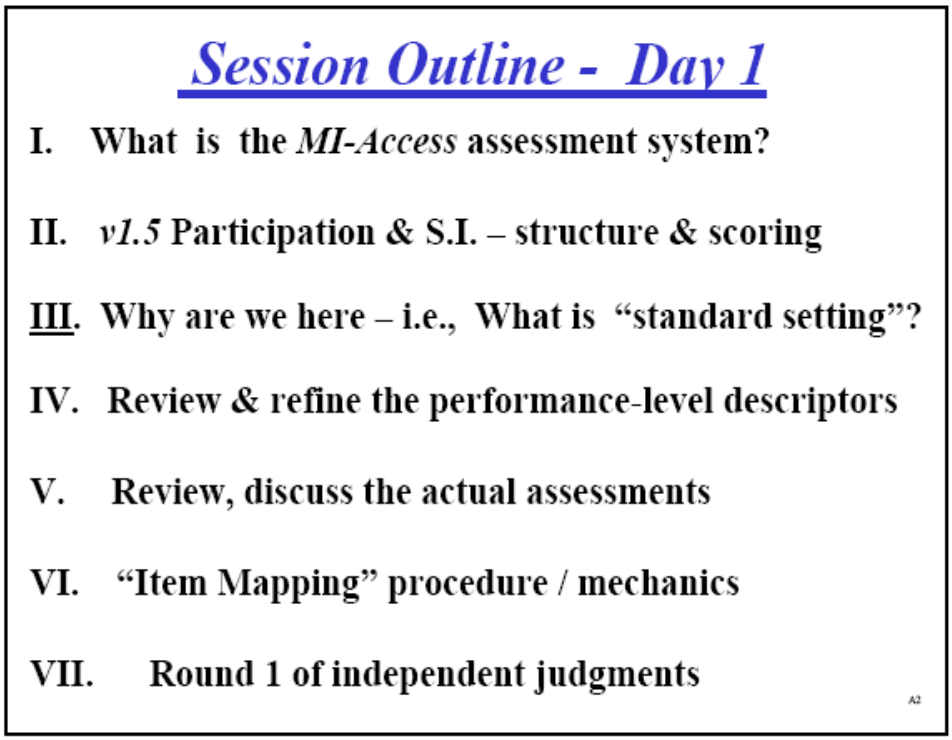

Additional Evidence
CE 2.0 – ACADEMIC ACHIEVEMENT STANDARDS
– Description of standard setting procedures and participants for the MI-Access Participation and Supported Independence, and evidence of Board adoption.
– Evidence of Board adoption of achievement standards for the MME
MI Access
Michigan Education


Additional Evidence
CE 4.0 - TECHNICAL QUALITY
– Documentation of technical quality indicators, except standard setting and materials previously submitted, as listed in the Peer Review Guidance for the MME as administered in spring 2007.
– Final technical manuals for the 2006-07 MME and MI-Access assessments.
MI Access
MICHIGAN Education


Additional Evidence
CE 5.0 – ALIGNMENT
– Evidence of alignment of the MI-Access Participation and Supported Independence with grade-level content standards.
CE 7.0 – REPORTS
– Sample MME Assessment Reports at the student, school, and State levels.
MI Access
MICHIGAN Education

Appendix I: General Introduction or Overview of the Standard Setting Process and the Three Performance Labels to be used





Setting Performance Standards

- ***Who's Involved?*** State and contractor roles
- ***Why BETA?*** Who's facilitating? Our role
- ***Why you?*** Individually & collectively:

  You are the ***experts***.
  You ***represent*** various concerned audiences.
  You are ***judges***, not psychometricians.
  You are ***advisors***, not policy makers

A4

Groundrules

NO DISCUSSIONS about the ***MI-Access program***
OR

- why to set standards
- the philosophy of educational assessment
- why these particular tasks/assessments
- the fairness of assessing special students
- why a particular procedure is being used

Confidentiality **of all materials & discussions.**

All discussions should be *as a group*.

A5

What *IS* Standard Setting?

- another frame of reference to interpret test scores ("how good is *good*"?)
- a routine, daily activity
- true "criterion-referencing"
- a *semi*-quantitative, *semi*-standardized, socio-political judgment process

- **NOT** "science" !

B1

4 Keys to Being a Great Judge:

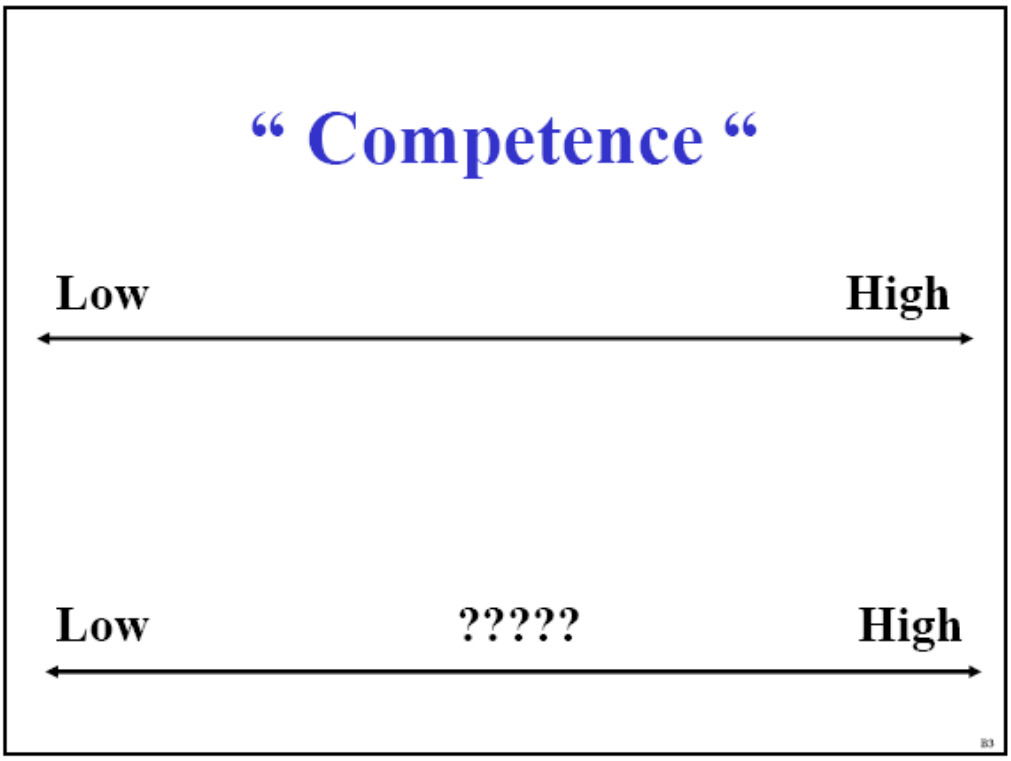
1. **Judgments** *vs.* Data

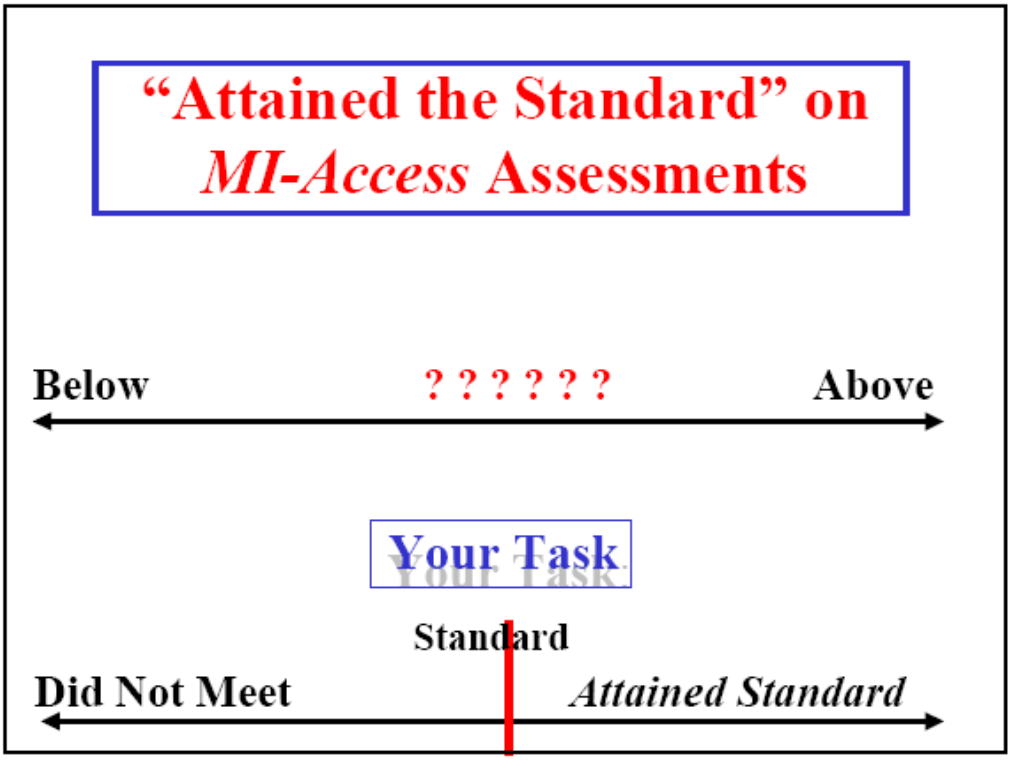
2. "**Should**" *vs.* "Will"

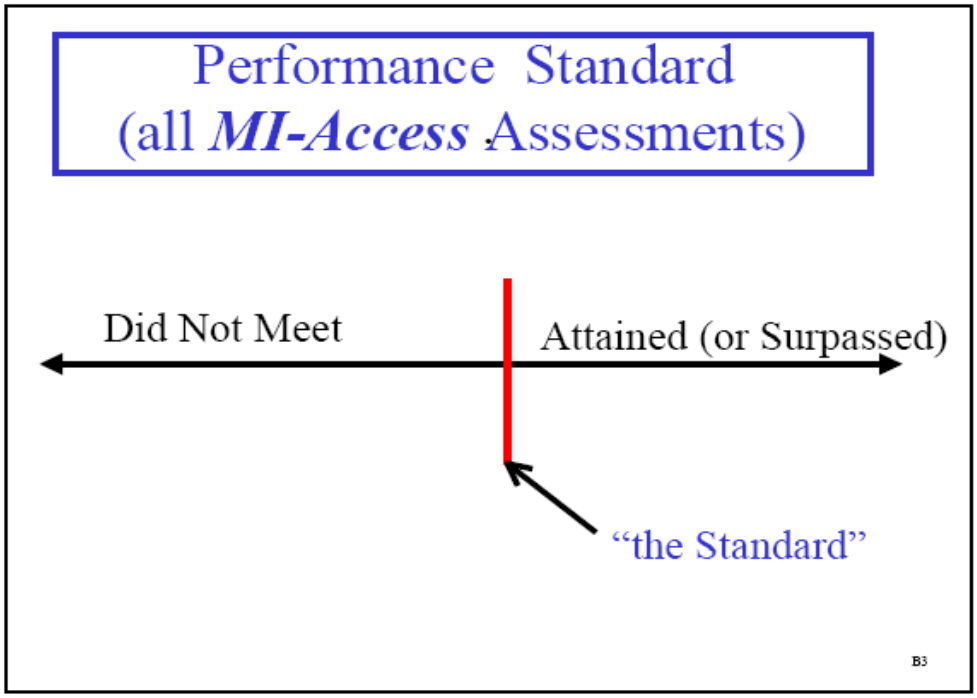
3. Consider ***ALL*** assessed Participation or Supported Independence students in the state

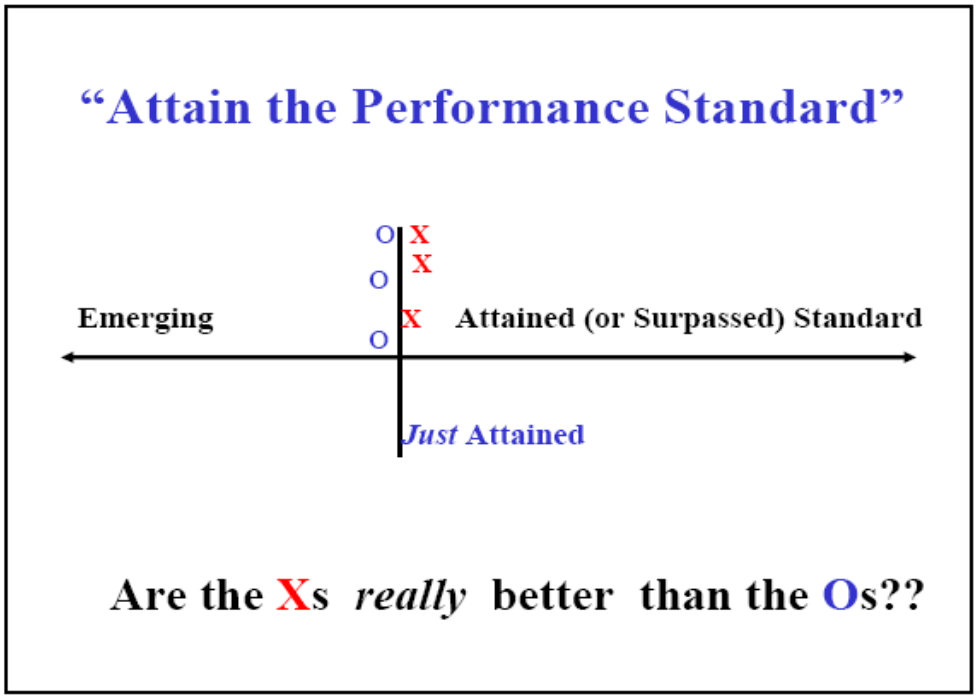
4. Think of ***threshold*** students, not *all* who attain the standard

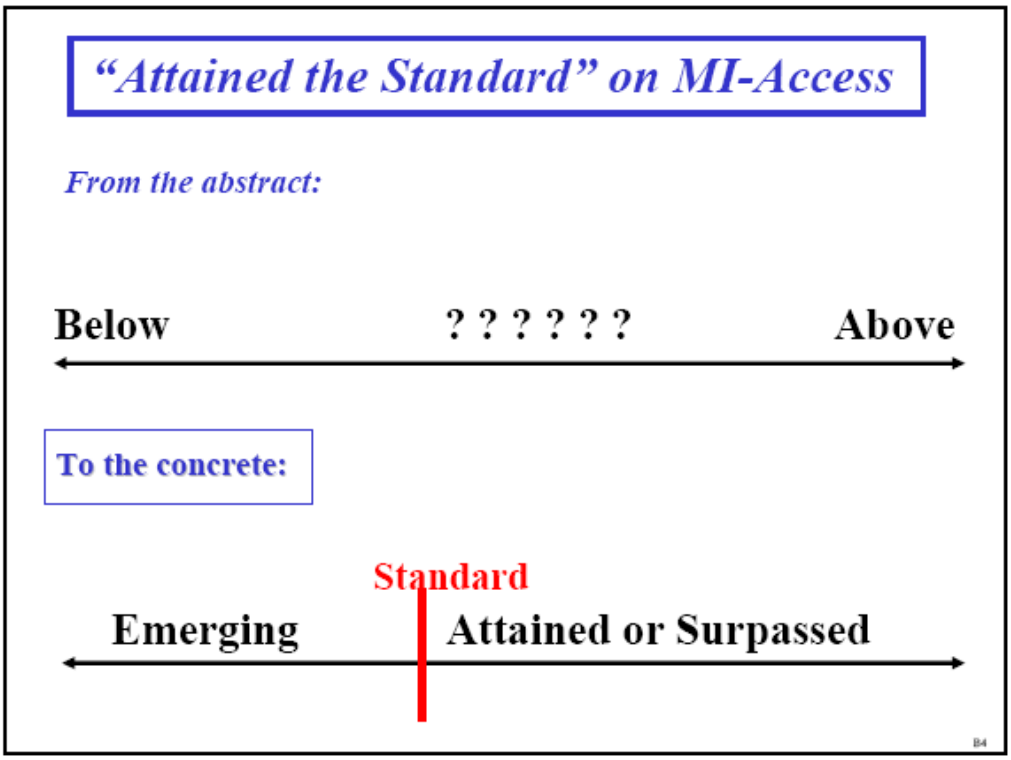
B2

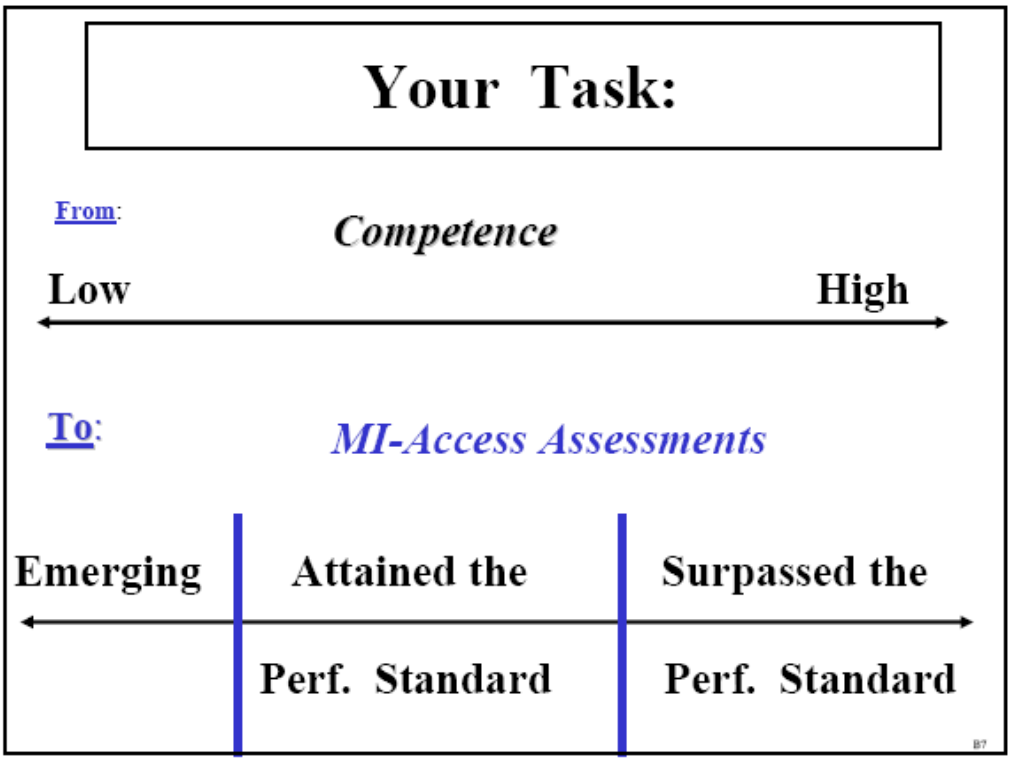

“ Competence “
Low
High
Low
?????
High

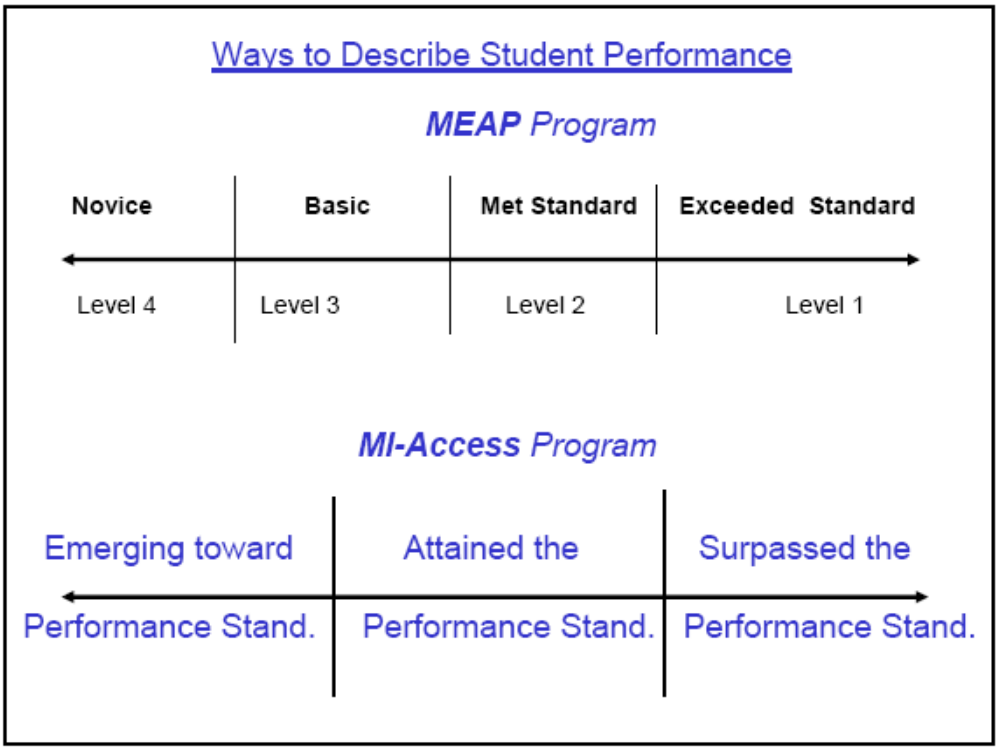

“Attained the Standard” on
MI-Access Assessments
Below
? ? ? ? ? ?
Above
Your Task
Standard
Did Not Meet
Attained Standard


Performance Standard
(all *MI-Access* Assessments)
Did Not Meet
Attained (or Surpassed)
"the Standard"
B3


"Attain the Performance Standard"
O
X
X
O
Emerging
X
Attained (or Surpassed) Standard
O
Just Attained
Are the Xs *really* better than the Os??


"Attained the Standard" on MI-Access
From the abstract:
Below
? ? ? ? ? ?
Above
To the concrete:
Standard
Emerging
Attained or Surpassed
B4


Your Task:
From:
Competence
Low
High
To:
MI-Access Assessments
Emerging
Attained the
Perf. Standard
Surpassed the
Perf. Standard
B7



Advice on Setting Standards

- **Set demanding, but *attainable* standards**
- **What "should be" probably shouldn't disregard what "*is*"**
- **Focus on *concrete* behaviors, skills, responses**

Use your best judgment !!

Performance-Level Descriptors for MI-Access

Start with the "labels:"

1. **Emerging Toward** the Performance Standard
2. **Attained** the Performance Standard
3. **Surpassed** the Performance Standard

Problem:

What do these *general* performance-level descriptions mean *concretely* for these grades, this content area, and these students ?

"Housekeeping"

- Security Forms
- Judges' Numbers
- Introductions
- Agenda for remaining time
- Break and lunch locations

Describe the assessed students *concretely*

- **What can they *do*? *Not* do?**
- **What *skills* do they possess ?**
- **What do they *know -- or not yet know*?**
- **What *behaviors* demonstrate that they "fit" the category?**

Don't Forget the Assessment !

Why? Standards are set on the actual *MI-Access* v1.5 assessments, not *in general*

What to do? "Be" a student
Think about each activity

Think about: Skill(s) / behaviors / expectations tapped
"***Attained***" / "***Surpassed the Standard***"
"Threshold" students

ASK: **SHOULD a student who JUST Attained the Michigan Standard perform this activity?**
How well?

D1

Revisit the PLDs

- **Now that you've seen the assessment, give another look at the PLDs.**
- **Any changes – additions, deletions, revisions – based on seeing the actual assessment?**
- **PLDs probably should be broader than any specific assessment.**
- **PLDs should be descriptive, not definitional**

Judgments you're to make:

Should a student score this well on the activity in order for his/her performance to be considered as Attaining the Standard?

Remember: each activity is scored by *two* observers:

***Each* observer scores *each* activity from:**
0 – 2 (S.I.), for a total of 4 possible points

0 – 3 (Partic.), for a total of 6 possible points

"Item Mapping" Procedure

- **"Invented" as the *Bookmark Method*™**
- **Has been used in over 30 states ("validity by application")**
- **Has both positive *and* negative features**
- **Simply *another* way to quantify judgments**

"Item Mapping" & *MI-Access*

- All activities appear in a "book" arranged from the easiest to most-difficult. Difficulty is defined by actual student performance.

- Each activity has 6 points associated with it, so each activity appears 6 times in the book – once for each point that the activity can contribute to the total score. Since there are 10 activities, each with 6 possible points, the book will have 60 pages / points.

- An *activity* really isn't "hard" or "easy," the particular *score points* are. That is, it's easy to get a 2 on an activity, but hard to get a 6. Thus, a 2 on a given activity will appear early in the ordered book, while a 4 appears later, and a 6 later yet. If it is easier to get a 4 on activity A than to get a 2 on activity B, the points will appear in this order.

P

"Item Mapping" & *MI-Access*

- All activities appear in a "book" arranged from the easiest to most-difficult. Difficulty is defined by actual student performance.

- Each activity has 4 points associated with it, so each activity appears 4 times in the book – once for each point that the activity can contribute to the total score. Since there are 15 activities, each with 4 possible points, the book will have 60 pages / points.

- An *activity* really isn't "hard" or "easy," the particular *score points* are. That is, it's easy to get a 2 on an activity, but hard to get a 4. Thus, a 2 on a given activity will appear early in the ordered book, while a 4 appears later. If it is easier to get a 4 on activity A than to get a 2 on activity B, the points will appear in this order.

SI

"Item Mapping:" How it Works

- Consider the book of activities and points from front to back. Ask for each: *Should* students who are *minimally* above "*Emerging*" into "*Attained*" perform this activity at this level (score point)?

- At the Activity/Score Point that you believe separates the two groups, place a "bookmark."

- *Read on* to the Activity / Score Point separating "*Attained*" from "*Surpassed* the Performance Standard;" place a second bookmark.

- The bookmarks define the two cuts you recommend.

"Item Mapping" - What Judges Do

- Read each Activity and its related score point. Consider the content assessed. Think about the Performance Expectation, behavior assessed, and response required.

- Decide: SHOULD threshold students *minimally* above the cut for "Attained" perform this activity *at this level*?

- If YES, read on; if ??, slow up; if NO, place a bookmark – on the Activity just *prior to* this one.

- Move on to the threshold of "Surpassed the Standard;" place another bookmark similarly.

- *Suggestion*: Mark off "zones" first, then "revisit the neighborhoods" to set the cuts

ISSUES:

Should / Ought

What *just* separates "Emerging"
***from* "Attained the Perf. Standard"**
***from* "Surpassed the Perf. Standard" ?**

***Threshold* Students** ***All* Assessed Students**

"Rules" for Ratings

- **Anonymity**
- **Independence**
- **Don't perseverate -- Make a best guess**
- **Find the "neighborhoods," then refine**

Marking Your Judgments

- Write in your Judge Number.
- Make only 2 marks for each Grade - A (Attained the Standard) and S (Surpassed the Standard)
- Make 2 cuts for each grade, then move on to the next grade / test.
- Should your recommended cuts change by grade level? That's your call!
- Doublecheck your Judgment Form before leaving.

Issues to Keep in Mind

Should or Ought, not Will

What behaviors separate performance at the two cuts?

Threshold Students

All Students who took this assessment

Session Overview -- Day 2

I. Review Day 1 - Questions & Issues

II. Feedback / Discussion of Round 1 results; student performance data

III. Round 2 judgments - reconsider Round 1

IV. Round 2 Feedback; *Implications/Impact*; Discussion

V. Final Judgments & Session Evaluation

A3

Discussion of Preliminary Ratings

- **WHY ????**
- Hearing from your peers helps you to:
  - become more **comfortable** with your judgments -- both the *how* and *where*
  - **reconsider** your earlier judgments

Student Performance Data

- **"Difficulty" data -- % of students who scored *this well or better.***

  Think about what this means.

E.g. Activity X: Score point 1 = 97
Score point 2 = 91
Score point 3 = 51
Score point 4 = 46

SI

Student Performance Data

- **"Difficulty" data -- % of students who scored *this well or better.***

  Think about what this means.

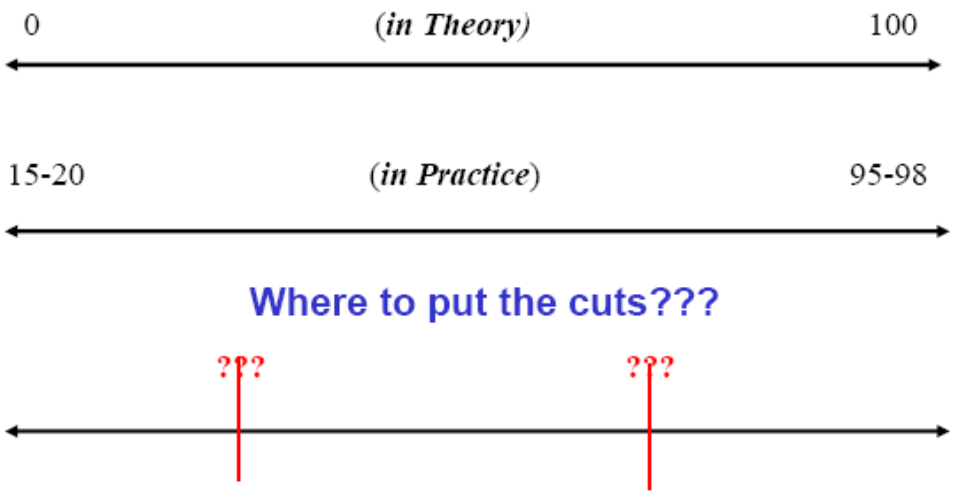
E.g. Activity X: Score point 1 = 97
Score point 2 = 91
Score point 3 = 71
Score point 4 = 66
Score point 5 = 38
Score point 6 = 36

P

Student Performance Data

- "Difficulty" data -- % of students who scored *this well or better.*
- Data tell how students *DID* perform
- Data CANNOT tell how students SHOULD perform *nor* how those who *Attained the Performance Standard* perform

"Activity Difficulty" Values



Why Reratings ?

- You are now a ***different*** judge
- Consider the judgments & views of your **peers**
- Goal: NOT "consensus," but ***reflection***

YOU ARE NOW a better judge, because you are a *better-informed* judge.

Reratings: What to Do?

1. Reflect on earlier ratings -- yours & peers
2. Reflect on the discussions we have had
3. Consider expanding the "zones" around your earlier judgments
4. Reconsider each judgment -- *should* threshold students complete this activity at this score / level of accomplishment?

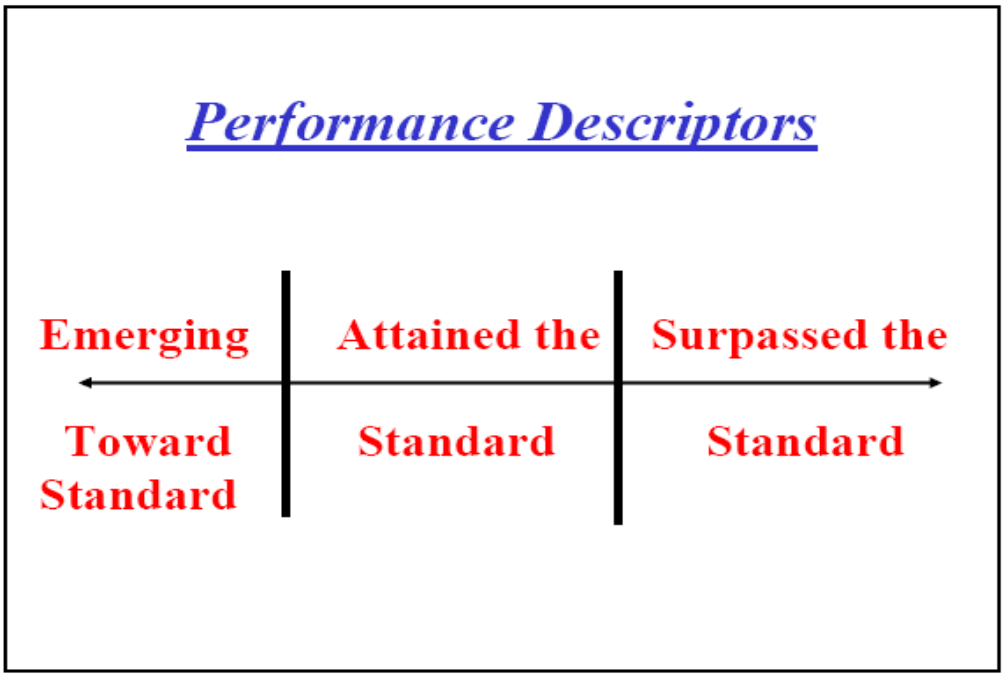
"How do I know if I'm *right*?"

- *There is no "right"*
- Did you keep in mind:

  "*Should*"?
  The *threshold* student?
  What "Emerging," "Attained" &
  "Surpassed the Standard" mean?
  All assessed Partic. or S.I. students?
  The discussions you've had?

Preparing for & Completing Round 3

- This is the only set of judgments that count, so *take your time*.
- When you finish and check your judgments,
  turn in: your Rating Form
  your session Evaluation Form
- Leave at your place:
  All papers you received/used here


Performance Descriptors
Emerging Toward Standard
Attained the Standard
Surpassed the Standard

Appendix J: Item Data

MI-Access Spring 2007 Core Item Difficulty Analysis
v1.5 Participation ELA

Elementary School
Number of Students = 805

Sequence #	Activity	Score Point
1	13	1
2	13	2
3	10	1
4	10	2
5	10	3
6	10	4
7	13	3
8	7	1
9	13	4
10	7	2
11	5	1
12	5	2
13	4	1
14	7	3
15	14	1
16	4	2
17	2	1
18	5	3
19	7	4
20	14	2
21	1	1
22	2	2
23	1	2
24	5	4
25	11	1
26	11	2

Middle School
Number of Students = 747

Sequence #	Activity	Score Point
1	10	1
2	10	2
3	10	3
4	10	4
5	13	1
6	13	2
7	13	3
8	13	4
9	6	1
10	6	2
11	11	1
12	11	2
13	14	1
14	14	2
15	5	1
16	2	1
17	5	2
18	10	5
19	2	2
20	10	6
21	6	3
22	1	1
23	1	2
24	6	4
25	11	3
26	2	3

High School
Number of Students = 239

Sequence #	Activity	Score Point
1	14	1
2	14	2
3	13	1
4	13	2
5	14	3
6	14	4
7	13	3
8	13	4
9	10	1
10	10	2
11	7	1
12	7	2
13	5	1
14	5	2
15	11	1
16	11	2
17	1	1
18	1	2
19	7	3
20	10	3
21	5	3
22	5	4
23	10	4
24	7	4
25	2	1
26	4	1

27	8	1	**27**	5	3	**27**	4	2
28	8	2	**28**	2	4	**28**	2	2
29	4	3	**29**	11	4	**29**	11	3
30	2	3	**30**	5	4	**30**	11	4
31	1	3	**31**	14	3	**31**	4	3
32	2	4	**32**	14	4	**32**	1	3
33	1	4	**33**	4	1	**33**	4	4
34	4	4	**34**	4	2	**34**	2	3
35	14	3	**35**	1	3	**35**	14	5
36	10	5	**36**	1	4	**36**	14	6
37	14	4	**37**	7	1	**37**	1	4
38	8	3	**38**	7	2	**38**	2	4
39	11	3	**39**	13	5	**39**	7	5
40	10	6	**40**	13	6	**40**	13	5
41	11	4	**41**	4	3	**41**	13	6
42	8	4	**42**	4	4	**42**	7	6
43	13	5	**43**	7	3	**43**	8	1
44	5	5	**44**	7	4	**44**	8	2
45	13	6	**45**	11	5	**45**	5	5
46	5	6	**46**	6	5	**46**	5	6
47	7	5	**47**	11	6	**47**	10	5
48	7	6	**48**	6	6	**48**	10	6
49	4	5	**49**	2	5	**49**	8	3
50	4	6	**50**	2	6	**50**	11	5
51	1	5	**51**	5	5	**51**	4	5
52	2	5	**52**	5	6	**52**	4	6
53	2	6	**53**	1	5	**53**	8	4
54	1	6	**54**	1	6	**54**	11	6
55	8	5	**55**	4	5	**55**	2	5
56	8	6	**56**	14	5	**56**	2	6
57	11	5	**57**	14	6	**57**	1	5
58	11	6	**58**	4	6	**58**	1	6
59	14	5	**59**	7	5	**59**	8	5
60	14	6	**60**	7	6	**60**	8	6

MI-Access Spring 2007 Core Item Difficulty Analysis
v1.5 Participation Math

Elementary School

Number of Students = 804

Sequence #	Activity	Score Point
1	23	1
2	23	2
3	16	1
4	16	2
5	23	3
6	26	1
7	26	2
8	16	3
9	23	4
10	16	4
11	26	3
12	26	4
13	20	1
14	20	2
15	23	5
16	23	6
17	25	1
18	25	2
19	20	3
20	20	4
21	16	5
22	29	1
23	29	2
24	16	6
25	17	1
26	17	2
27	25	3

Middle School

Number of Students = 747

Sequence #	Activity	Score Point
1	16	1
2	16	2
3	28	1
4	28	2
5	16	3
6	26	1
7	16	4
8	26	2
9	28	3
10	17	1
11	28	4
12	17	2
13	26	3
14	26	4
15	22	1
16	20	1
17	22	2
18	20	2
19	17	3
20	25	1
21	17	4
22	25	2
23	16	5
24	22	3
25	22	4
26	25	3
27	16	6

High School

Number of Students = 239

Sequence #	Activity	Score Point
1	16	1
2	16	2
3	22	1
4	17	1
5	22	2
6	16	3
7	16	4
8	17	2
9	22	3
10	22	4
11	28	1
12	28	2
13	17	3
14	28	3
15	17	4
16	25	1
17	25	2
18	28	4
19	16	5
20	16	6
21	26	1
22	26	2
23	25	3
24	23	1
25	23	2
26	25	4
27	19	1

28	25	4	**28**	25	4	**28**	22	5
29	26	5	**29**	23	1	**29**	26	3
30	28	1	**30**	23	2	**30**	19	2
31	26	6	**31**	20	3	**31**	26	4
32	28	2	**32**	20	4	**32**	23	3
33	29	3	**33**	23	3	**33**	22	6
34	19	1	**34**	23	4	**34**	23	4
35	19	2	**35**	28	5	**35**	28	5
36	29	4	**36**	26	5	**36**	29	1
37	22	1	**37**	26	6	**37**	29	2
38	17	3	**38**	28	6	**38**	28	6
39	28	3	**39**	29	1	**39**	20	1
40	22	2	**40**	22	5	**40**	20	2
41	28	4	**41**	29	2	**41**	25	5
42	17	4	**42**	19	1	**42**	19	3
43	25	5	**43**	19	2	**43**	25	6
44	19	3	**44**	22	6	**44**	19	4
45	25	6	**45**	17	5	**45**	29	3
46	20	5	**46**	25	5	**46**	29	4
47	19	4	**47**	25	6	**47**	17	5
48	20	6	**48**	17	6	**48**	17	6
49	22	3	**49**	19	3	**49**	23	5
50	22	4	**50**	19	4	**50**	20	3
51	29	5	**51**	29	3	**51**	20	4
52	28	5	**52**	29	4	**52**	23	6
53	29	6	**53**	23	5	**53**	26	5
54	28	6	**54**	23	6	**54**	26	6
55	22	5	**55**	20	5	**55**	29	5
56	19	5	**56**	20	6	**56**	29	6
57	22	6	**57**	29	5	**57**	20	5
58	17	5	**58**	29	6	**58**	19	5
59	19	6	**59**	19	5	**59**	20	6
60	17	6	**60**	19	6	**60**	19	6

MI-Access Spring 2007 Core Item Difficulty Analysis

v1.5 Supported Independence ELA

Elementary School

Number of Students = 1230

Sequence #	Activity	Score Point
1	1	1
2	1	2
3	5	1
4	9	1
5	18	1
6	13	1
7	18	2
8	9	2
9	13	2
10	5	2
11	10	1
12	17	1
13	15	1
14	10	2
15	17	2
16	15	2
17	6	1
18	6	2
19	1	3
20	1	4
21	7	1
22	7	2
23	2	1
24	3	1
25	13	3
26	11	1
27	2	2
28	3	2

Middle School

Number of Students = 1395

Sequence #	Activity	Score Point
1	18	1
2	5	1
3	19	1
4	5	2
5	13	1
6	18	2
7	13	2
8	6	1
9	19	2
10	6	2
11	7	1
12	7	2
13	1	1
14	5	3
15	1	2
16	5	4
17	2	1
18	3	1
19	2	2
20	3	2
21	11	1
22	17	1
23	11	2
24	17	2
25	10	1
26	13	3
27	13	4
28	10	2

High School

Number of Students = 513

Sequence #	Activity	Score Point
1	13	1
2	14	1
3	13	2
4	9	1
5	14	2
6	18	1
7	9	2
8	18	2
9	11	1
10	15	1
11	11	2
12	1	1
13	15	2
14	1	2
15	5	1
16	5	2
17	2	1
18	2	2
19	3	1
20	3	2
21	10	1
22	9	3
23	10	2
24	9	4
25	19	1
26	14	3
27	19	2
28	7	1

29	11	2	**29**	6	3	**29**	13	3
30	17	3	**30**	6	4	**30**	14	4
31	13	4	**31**	19	3	**31**	13	4
32	9	3	**32**	14	1	**32**	7	2
33	5	3	**33**	15	1	**33**	18	3
34	17	4	**34**	14	2	**34**	1	3
35	19	1	**35**	19	4	**35**	6	1
36	5	4	**36**	15	2	**36**	1	4
37	19	2	**37**	1	3	**37**	18	4
38	6	3	**38**	9	1	**38**	6	2
39	9	4	**39**	1	4	**39**	2	3
40	14	1	**40**	9	2	**40**	15	3
41	6	4	**41**	7	3	**41**	2	4
42	14	2	**42**	3	3	**42**	11	3
43	10	3	**43**	7	4	**43**	15	4
44	15	3	**44**	18	3	**44**	17	1
45	10	4	**45**	3	4	**45**	5	3
46	15	4	**46**	18	4	**46**	11	4
47	2	3	**47**	2	3	**47**	17	2
48	2	4	**48**	17	3	**48**	5	4
49	3	3	**49**	17	4	**49**	3	3
50	18	3	**50**	2	4	**50**	19	3
51	3	4	**51**	11	3	**51**	3	4
52	18	4	**52**	11	4	**52**	19	4
53	7	3	**53**	10	3	**53**	10	3
54	7	4	**54**	10	4	**54**	10	4
55	11	3	**55**	15	3	**55**	7	3
56	11	4	**56**	14	3	**56**	7	4
57	19	3	**57**	15	4	**57**	17	3
58	19	4	**58**	9	3	**58**	17	4
59	14	3	**59**	14	4	**59**	6	3
60	14	4	**60**	9	4	**60**	6	4

MI-Access Spring 2007 Core Item Difficulty Analysis

v1.5 Supported Independence Math

Elementary School

Number of Students = 1230

Sequence #	Activity	Score Point
1	25	1
2	25	2
3	35	1
4	35	2
5	23	1
6	22	1
7	23	2
8	22	2
9	21	1
10	21	2
11	37	1
12	37	2
13	39	1
14	31	1
15	39	2
16	38	1
17	38	2
18	29	1
19	31	2
20	35	3
21	29	2
22	25	3
23	35	4
24	30	1
25	30	2
26	25	4
27	27	1
28	27	2

Middle School

Number of Students = 1394

Sequence #	Activity	Score Point
1	23	1
2	26	1
3	23	2
4	26	2
5	21	1
6	21	2
7	35	1
8	35	2
9	22	1
10	22	2
11	25	1
12	25	2
13	27	1
14	27	2
15	30	1
16	30	2
17	29	1
18	29	2
19	23	3
20	23	4
21	37	1
22	37	2
23	21	3
24	35	3
25	21	4
26	35	4
27	26	3
28	38	1

High School

Number of Students = 510

Sequence #	Activity	Score Point
1	33	1
2	33	2
3	21	1
4	29	1
5	29	2
6	21	2
7	23	1
8	23	2
9	34	1
10	33	3
11	31	1
12	34	2
13	25	1
14	33	4
15	25	2
16	31	2
17	27	1
18	27	2
19	22	1
20	22	2
21	29	3
22	29	4
23	35	1
24	35	2
25	31	3
26	21	3
27	39	1
28	31	4

29	23	3	**29**	38	2	**29**	39	2
30	26	1	**30**	39	1	**30**	21	4
31	23	4	**31**	26	4	**31**	34	3
32	38	3	**32**	39	2	**32**	34	4
33	26	2	**33**	27	3	**33**	25	3
34	38	4	**34**	27	4	**34**	23	3
35	39	3	**35**	33	1	**35**	37	1
36	31	3	**36**	22	3	**36**	25	4
37	39	4	**37**	33	2	**37**	37	2
38	22	3	**38**	25	3	**38**	23	4
39	31	4	**39**	22	4	**39**	38	1
40	21	3	**40**	31	1	**40**	27	3
41	22	4	**41**	25	4	**41**	30	1
42	34	1	**42**	31	2	**42**	30	2
43	21	4	**43**	29	3	**43**	38	2
44	33	1	**44**	38	3	**44**	27	4
45	34	2	**45**	38	4	**45**	26	1
46	37	3	**46**	29	4	**46**	35	3
47	30	3	**47**	37	3	**47**	26	2
48	33	2	**48**	30	3	**48**	35	4
49	37	4	**49**	34	1	**49**	22	3
50	29	3	**50**	37	4	**50**	39	3
51	30	4	**51**	30	4	**51**	22	4
52	29	4	**52**	34	2	**52**	39	4
53	27	3	**53**	39	3	**53**	37	3
54	27	4	**54**	39	4	**54**	37	4
55	26	3	**55**	33	3	**55**	38	3
56	26	4	**56**	33	4	**56**	38	4
57	33	3	**57**	34	3	**57**	30	3
58	33	4	**58**	34	4	**58**	30	4
59	34	3	**59**	31	3	**59**	26	3
60	34	4	**60**	31	4	**60**	26	4

Appendix K: Summary Data on Assessments

Summary Data for Spring 2007 Statewide Administration of the Participation and Supported Independence v1.5 Assessments by Grade.

Test Level	Subject	Grade	N	Max Points	Mean	Std
P	ELA	03	340	60	24.7	19.2
P	ELA	04	255	60	24.1	18.3
P	ELA	05	299	60	24.5	18.5
P	ELA	06	272	60	22.3	19.3
P	ELA	07	265	60	22.5	18.2
P	ELA	08	293	60	25.0	19.2
P	ELA	11	266	60	22.7	19.1
P	Math	03	340	60	27.0	19.2
P	Math	04	254	60	25.4	18.7
P	Math	05	299	60	24.5	19.2
P	Math	06	272	60	24.2	20.5
P	Math	07	265	60	24.4	19.3
P	Math	08	293	60	27.3	20.7
P	Math	11	266	60	25.7	21.0
S	ELA	03	501	60	39.5	14.3
S	ELA	04	465	60	41.0	13.0
S	ELA	05	445	60	41.6	13.8
S	ELA	06	487	60	35.8	15.1
S	ELA	07	565	60	37.6	14.4
S	ELA	08	577	60	37.6	14.5
S	ELA	11	616	60	39.3	14.1
S	Math	03	502	60	36.2	15.7
S	Math	04	463	60	37.8	15.1
S	Math	05	446	60	39.8	15.4
S	Math	06	486	60	31.3	16.2
S	Math	07	565	60	32.7	15.5
S	Math	08	577	60	33.6	16.0
S	Math	11	613	60	37.2	14.7

Appendix L: MI-Access Standard Setting Panelist Evaluations

Panelist Evaluations

MI-Access Participation and Supported Independence v1.5 English Language Arts and Mathematics Standard Setting Process

Number of Panelists = 57
Number of Evaluations Submitted = 55

Indicate the level of success of various components of the standard-setting session in which you participated:

Component	Not Very Successful	Partially Successful	Successful	Very Successful
Introduction to the *MI-Access* Assessment	0%	3%	45%	47%
Standard-setting process intro. – Large group	7%	16%	40%	36%
Performance Level Descriptor review	5%	20%	49%	25%
Standard-setting orientation – Small group	5%	18%	41%	32%
Group discussions of the panel	3%	18%	40%	34%
Data presentations before Rounds 2 & 3	1%	7%	43%	38%

Indicate the importance of each of these factors in making your cut-score recommendations.

Component	Not Very Successful	Partially Successful	Successful	Very Successful
Performance Level Descriptors	3%	14%	43%	34%
Your perception of the assessment's difficulty	1%	9%	52%	32%
Your own professional experiences	1%	9%	34%	52%
Your initial judgments (Round 1)	5%	32%	38%	20%
Group discussions of the panel	1%	7%	43%	43%
Feedback data provided to the panel	0%	3%	38%	52%
Policy environment in the state	5%	29%	38%	16%
What students would *vs.* should be able to do	5%	9%	50%	34%

I understood the task of recommending performance standards when I did my work for:

	Not Very Well	Moderately Well	Very Well
Round 1	30%	49%	18%
Round 2	1%	38%	58%
Round 3	1%	7%	83%

I understood the data that were provided to the panel prior to:

	Not Very Well	Moderately Well	Very Well
Round 1	3%	38%	52%
Round 2	1%	18%	78%

How confident are you with your *personal* classification of students at each level of proficiency?

Performance Level	Not Confident	Somewhat Confident	Confident	Very Confident
Surpassed the Performance Standard	0%	10%	47%	34%
Attained the Performance Standard	0%	10%	54%	27%
Emerging Towards the Performance Standard	0%	10%	50%	32%

Appendix M: Results by Round

Judge Recommendations By Round
Participation v1.5 - ELA

Grade 3

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	28	31	22	46	45	45
2	29	24	18	43	45	47
3	33	21	18	45	45	47
4	40	26	18	52	41	45
5	17	20	18	41	41	49
6	19	29	23	41	41	48
7	24	18	16	45	39	39
8	28	24	24	41	45	50
9	28	13	20	41	44	45
10	29	28	26	51	45	45
11	14	28	28	40	51	43
12	19	24	18	47	43	48
13	33	32	18	52	50	47
14		26	26		45	45

Grade 4

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	28	31	22	46	45	45
2	29	24	18	43	45	47
3	33	21	18	45	45	47
4	40	26	19	52	41	45
5	17	20	18	41	41	49
6	19	29	25	41	41	49
7	24	18	17	45	39	39
8	28	24	25	41	45	51
9	28	13	20	41	44	45
10	29	28	27	51	45	45
11	14	28	28	43	51	43
12	19	24	18	47	43	48
13	29	32	18	53	50	47
14		28	25		45	45

Grade 5

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	28	31	24	46	45	47
2	29	24	21	43	45	50
3	33	21	21	45	45	50
4	40	26	20	52	41	50
5	17	20	21	41	41	49
6	19	29	28	41	41	50
7	24	18	18	45	39	39
8	28	24	26	41	45	52
9	28	13	20	41	44	45
10	29	28	28	51	45	45
11	18	28	29	43	51	45
12	19	24	21	49	43	50
13	29	32	20	57	50	48
14		28	28		45	45

Grade 6

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	36	29	19	45	45	45
2	33	21	19	45	45	42
3	31	21	19	41	45	42
4	21	21	19	53	45	42
5	24	29	19	45	45	42
6	33	30	23	53	45	42
7	21	23	19	52	43	43
8	38	21	24	44	45	49
9	31	20	20	43	40	45
10	18	30	24	45	43	43
11	20	18	18	45	52	45
12	20	21	19	51	45	42
13	55	34	19	59	52	48
14		31	31		40	40

Grade 7

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	36	29	19	45	45	45
2	33	21	19	45	45	42
3	31	21	19	41	45	42
4	21	21	19	53	45	42
5	24	29	19	45	45	42
6	33	30	27	53	45	42
7	21	23	19	52	43	44
8	38	21	25	44	45	50
9	29	20	20	40	40	45
10	18	30	26	45	43	44
11	21	18	18	47	52	45
12	20	21	19	51	45	42
13	55	34	19	59	52	48
14		29	27		40	45

Grade 8

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	36	29	23	45	45	45
2	33	21	23	45	45	46
3	31	21	23	41	45	47
4	21	21	23	53	45	46
5	24	29	23	45	45	47
6	33	30	31	53	45	48
7	21	23	19	52	43	44
8	38	21	26	44	45	52
9	29	20	20	40	40	45
10	18	30	29	45	43	46
11	21	18	21	47	52	47
12	20	21	23	55	45	45
13	55	34	21	59	52	49
14		29	29		40	40

Grade 11

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	43	29	12	50	46	43
2	24	18	18	39	44	50
3	19	18	18	39	40	42
4	23	23	18	42	42	42
5	18	21	19	37	37	41
6	23	23	19	38	37	42
7	24	23	19	49	43	44
8	24	23	26	38	42	50
9	29	10	19	40	40	44
10	19	23	23	54	42	42
11	22	12	19	54	54	45
12	21	19	19	54	50	54
13	56	34	18	59	52	47
14		31	31		42	42

Judge Recommendations By Round
Participation v1.5 - Math

Grade 3

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	26	18	16	42	36	36
2	38	35	32	50	49	50
3	20	20	20	25	27	27
4	16	16	12	17	17	17
5	17	21	20	33	38	42
6	11	11	7	45	40	44
7	15	14	19	29	27	36
8	18	19	15	40	36	36
9	18	20	20	28	30	32
10	15	18	15	43	31	39
11	10	12	12	16	33	36
12	9	26	24	21	42	42
13	23	15	11	24	24	23
14	28	24	18	47	44	44

Grade 4

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	26	23	20	42	40	40
2	40	37	35	50	50	50
3	28	28	28	46	42	42
4	24	24	17	25	25	30
5	23	23	23	40	41	43
6	11	11	7	45	40	44
7	15	14	19	29	27	36
8	18	23	20	40	40	40
9	23	22	22	40	38	40
10	15	23	18	43	36	41
11	16	18	16	24	54	41
12	10	26	24	22	42	42
13	36	31	28	53	38	38
14	28	26	20	47	46	46

Grade 5

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	26	26	23	42	42	42
2	44	38	37	50	50	50
3	53	25	26	55	37	38
4	25	25	17	28	28	28
5	23	25	26	40	43	47
6	11	17	7	45	40	44
7	15	14	19	29	27	36
8	18	23	22	40	40	40
9	29	30	30	49	48	50
10	15	26	22	43	43	43
11	24	24	24	31	54	45
12	12	31	30	23	48	48
13	48	44	43	59	49	50
14	28	28	24	47	48	48

Grade 6

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	27	21	22	44	44	44
2	44	38	33	50	50	50
3	9	26	29	20	40	42
4	8	30	15	10	31	30
5	18	24	24	30	41	44
6	13	17	7	44	44	50
7	24	17	20	37	31	37
8	24	25	21	33	36	36
9	31	31	28	44	46	46
10	21	24	21	36	38	38
11	26	27	27	37	45	47
12	15	27	25	24	43	43
13	44	17	10	50	24	23
14	31	30	28	49	45	45

Grade 7

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	28	21	22	44	44	44
2	44	39	34	50	50	50
3	28	27	27	29	49	49
4	15	39	21	16	41	29
5	19	26	27	30	43	46
6	13	17	7	44	44	50
7	24	17	20	37	31	37
8	24	25	22	33	36	36
9	36	34	31	49	49	49
10	23	28	23	40	42	43
11	37	37	37	45	54	52
12	15	27	25	25	43	43
13	54	32	31	56	36	39
14	31	33	30	49	47	47

Grade 8

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	28	28	22	44	44	44
2	44	39	34	52	50	50
3	19	26	26	28	48	50
4	41	41	29	43	43	39
5	20	28	28	30	45	49
6	13	17	7	44	44	50
7	24	17	20	37	31	36
8	24	25	22	33	36	36
9	42	38	34	52	52	52
10	25	32	25	49	48	48
11	45	45	44	50	57	54
12	18	31	28	26	45	45
13	58	43	41	60	47	49
14	31	34	31	49	49	49

Grade 11

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	38	25	22	48	48	49
2	42	40	37	50	50	50
3	27	27	27	45	52	52
4	38	38	37	45	45	44
5	28	33	31	40	47	50
6	15	20	15	47	47	47
7	34	12	18	42	27	37
8	18	27	22	26	45	40
9	32	32	32	44	46	50
10	32	26	26	46	42	48
11	48	48	48	56	57	57
12	26	30	27	34	42	42
13	57	30	30	60	44	44
14	27	28	28	54	49	49

Judge Recommendations By Round
Supported Independence v1.5 - ELA

Grade 3

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	8	31	36	25	52	52
2	22	24	24	38	37	40
3	9	20	27	22	31	39
4	9	10	21	45	44	44
5	9	17	21	15	32	33
6	19	21	25	41	43	43
7	20	16	3	31	25	21
8	14	21	24	32	34	39
9	10	18	22	33	37	45
10	7	28	24	29	39	39
11	27	28	28	31	31	31
12	39	39	39	42	45	45
13	24	21	23	29	26	43
14	29	25	25	46	39	42

Grade 4

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	8	31	36	25	52	52
2	31	31	33	40	49	50
3	39	29	31	54	38	47
4	13	17	25	48	48	48
5	29	29	29	40	40	40
6	20	22	27	41	47	47
7	20	25	14	34	29	26
8	14	22	26	35	36	45
9	20	20	25	40	44	48
10	28	36	29	35	56	43
11	39	34	34	41	37	37
12	45	45	45	49	49	49
13	29	31	32	33	35	46
14	38	27	30	48	42	48

Grade 5

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	8	31	36	25	52	52
2	38	40	38	54	54	50
3	34	33	39	56	41	53
4	20	22	32	54	50	54
5	54	42	32	60	58	45
6	20	22	29	41	49	49
7	20	31	26	36	39	39
8	15	22	26	35	36	46
9	20	20	25	40	44	48
10	37	36	36	42	58	47
11	52	40	40	58	44	44
12	49	49	49	51	54	54
13	29	33	34	34	38	48
14	41	30	31	53	45	51

Grade 6

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	16	30	39	26	52	55
2	10	22	24	36	47	47
3	12	18	29	24	33	38
4	13	12	22	40	44	44
5	15	23	22	25	34	34
6	14	21	25	39	39	43
7	7	10	10	20	24	21
8	20	20	20	44	34	35
9	12	20	22	38	37	38
10	12	23	22	22	33	41
11	24	26	34	27	29	41
12	37	37	37	39	42	42
13	29	24	23	36	30	37
14	42	20	21	53	36	41

Grade 7

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	16	30	39	26	52	55
2	24	27	27	46	50	50
3	19	23	34	40	40	43
4	16	16	27	45	46	46
5	21	38	27	33	54	43
6	14	21	27	41	43	45
7	7	16	20	24	28	28
8	21	21	23	44	35	42
9	18	22	23	48	42	42
10	24	35	29	34	47	47
11	30	34	37	44	43	44
12	40	43	43	45	50	50
13	33	28	27	39	33	44
14	47	26	27	55	43	47

Grade 8

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	16	30	39	26	52	55
2	36	36	33	50	55	53
3	36	26	39	44	43	46
4	23	23	30	50	49	49
5	38	38	38	54	54	54
6	14	22	30	41	45	47
7	7	20	24	31	31	31
8	21	21	23	44	41	44
9	18	22	23	48	44	44
10	40	39	29	55	54	47
11	49	45	48	54	49	51
12	48	51	51	56	56	56
13	35	29	28	41	35	46
14	48	30	29	55	46	48

Grade 11

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	13	30	30	47	40	50
2	23	41	29	49	51	49
3	32	29	35	43	41	46
4	21	22	23	46	51	51
5	32	32	32	51	50	51
6	22	20	30	39	41	45
7	9	27	27	10	34	34
8	21	23	28	38	38	41
9	18	23	20	42	42	45
10	22	33	29	42	51	47
11	11	30	36	24	37	47
12	48	48	48	50	56	56
13	34	26	28	41	39	42
14	36	29	29	51	48	48

Judge Recommendations By Round
Supported Independence v1.5 - Math

Grade 3

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	20	20	20	38	30	45
2	22	24	19	38	34	37
3	23	18	13	37	29	39
4	23	23	20	39	39	39
5	19	19	19	26	32	32
6	15	15	20	28	30	36
7	7	16	16	30	44	44
8	17	17	17	26	36	38
9	17	30	23	23	45	38
10	15	20	15	21	32	45
11	11	20	11	19	30	41
12	20	20	17	31	32	49
13	26	30	27	41	49	51
14	20	20	20	36	34	34
15	21	28	21	40	34	34

Grade 4

	Attained			Surpassed		
Judge	1	2	3	1	2	3
1	31	24	24	41	33	46
2	26	26	23	48	38	41
3	32	23	23	39	40	41
4	24	24	23	45	41	41
5	23	23	23	34	34	34
6	18	18	22	33	32	38
7	16	16	16	36	44	44
8	25	17	17	37	36	38
9	33	45	26	36	55	47
10	23	23	17	39	34	48
11	33	24	16	48	34	44
12	29	23	19	48	36	49
13	30	30	30	46	49	54
14	37	36	24	50	46	46
15	21	32	23	40	38	38

Grade 5

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	38	26	26	47	35	48
2	31	30	25	51	39	45
3	38	32	25	44	44	45
4	25	25	25	49	43	43
5	26	26	26	48	41	41
6	30	19	23	44	33	39
7	25	20	20	52	51	51
8	37	26	20	54	41	43
9	47	50	29	60	59	50
10	40	25	19	46	36	50
11	54	27	22	60	37	50
12	29	26	20	48	41	49
13	36	30	30	53	49	54
14	41	40	34	52	51	51
15	21	36	27	40	41	41

Grade 6

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	13	18	16	33	27	38
2	22	21	17	38	30	39
3	12	14	14	17	28	28
4	9	20	17	23	33	36
5	19	15	15	28	28	34
6	12	11	16	28	25	31
7	6	13	13	30	36	36
8	8	16	18	18	35	38
9	15	35	18	31	45	37
10	17	12	12	26	24	44
11	18	30	10	25	40	42
12	24	30	12	44	40	41
13	34	23	18	46	42	50
14	25	24	24	34	34	36
15	19	21	21	35	32	31

Grade 7

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	23	20	18	37	30	40
2	25	22	20	45	32	45
3	34	27	20	38	33	48
4	12	23	19	25	34	38
5	21	20	20	38	31	36
6	20	14	17	38	28	33
7	13	13	13	34	36	36
8	20	16	18	24	35	40
9	34	43	20	39	55	42
10	26	14	14	33	26	47
11	34	34	14	48	44	49
12	31	34	16	46	44	50
13	38	23	20	48	42	50
14	34	33	31	45	42	42
15	19	22	22	35	34	34

Grade 8

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	25	23	20	41	32	45
2	26	24	19	48	35	37
3	36	32	13	39	38	39
4	17	28	20	27	38	39
5	23	23	19	42	34	32
6	36	15	20	51	28	36
7	18	18	16	40	42	44
8	44	24	17	54	43	38
9	53	53	23	59	58	38
10	37	16	15	48	28	45
11	55	38	11	60	48	41
12	38	38	17	46	49	49
13	43	23	27	52	42	51
14	43	43	20	55	54	34
15	19	33	21	35	43	34

Grade 11

	Attained			Surpassed		
Judge	**1**	**2**	**3**	**1**	**2**	**3**
1	17	22	21	29	27	46
2	19	19	19	37	41	45
3	19	22	21	22	34	50
4	21	21	21	40	40	44
5	19	16	22	39	28	43
6	27	19	19	47	38	43
7	18	18	18	46	46	46
8	36	21	21	57	57	40
9	51	46	28	55	53	46
10	33	20	20	51	34	48
11	26	43	20	43	52	47
12	38	43	21	48	52	47
13	48	30	25	58	53	53
14	18	18	18	39	39	39
15	10	33	22	41	47	45

Appendix N: MI-Access Participation v1.5 ELA - Panel Results by Round

MI-Access v1.5 Participation v1.5 - ELA Grade 3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	56	24	20
Round 2	53	27	20
Round 3	**45**	**38**	**17**
Final	**45**	**38**	**17**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	28	26.2	7.4	45	45.0	4.4
Round 2	25	24.6	5.2	45	44.3	3.3
Round 3	**19**	20.9	3.9	**46**	45.9	2.8
Final	**19**			**46**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.0	0.7
SEMedian	1.3	0.9
SEM (Test)	5.5	5.5
SEMedian + SEM (Test) (SEComposite)	5.7	5.6

MI-Access v1.5 Participation - ELA Grade 4

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	61	20	19
Round 2	55	26	19
Round 3	**47**	**38**	**15**
Final	**47**	**38**	**15**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	28	25.9	7.1	45	45.3	4.3
Round 2	25	24.7	5.3	45	44.3	3.3
Round 3	**20**	21.3	3.9	**46**	46.1	2.9
Final	**20**			**46**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.0	0.8
SEMedian	1.3	1.0
SEM (Test)	5.5	5.5
SEMedian + SEM (Test) (SEComposite)	5.7	5.6

MI-Access v1.5 Participation - ELA Grade 5

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	55	28	17
Round 2	51	32	17
Round 3	**46**	**43**	**11**
Final	**46**	**41**	**13**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	28	26.2	6.6	45	45.8	5.1
Round 2	25	24.7	5.3	45	44.3	3.3
Round 3	**21**	23.2	3.8	**49**	47.5	3.4
Recommended	**21**			**48**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.0	0.9
SEMedian	1.3	1.1
SEM (Test)	5.6	5.6
SEMedian + SEM (Test) (SEComposite)	5.7	5.7

MI-Access v1.5 Participation - ELA Grade 6

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	64	18	18
Round 2	56	26	18
Round 3	**51**	**29**	**20**
Final	**51**	**29**	**20**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	31	29.3	10.3	45	47.8	5.2
Round 2	22	24.9	5.2	45	45.0	3.5
Round 3	**19**	20.9	3.5	**43**	43.6	2.5
Final	**19**			**43**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	0.9	0.7
SEMedian	1.2	0.8
SEM (Test)	5.2	5.2
SEMedian + SEM (Test) (SEComposite)	5.3	5.3

MI-Access v1.5 Participation - ELA Grade 7

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	64	20	16
Round 2	58	26	16
Round 3	**52**	**31**	**17**
Final	**52**	**31**	**17**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	29	29.2	10.2	45	47.7	5.5
Round 2	22	24.8	5.1	45	45.0	3.5
Round 3	**19**	21.1	3.5	**44**	44.1	2.5
Final	**19**			**44**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	0.9	0.7
SEMedian	1.2	0.8
SEM (Test)	5.5	5.5
SEMedian + SEM (Test) (SEComposite)	5.6	5.6

MI-Access v1.5 Participation - ELA Grade 8

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	57	22	21
Round 2	47	32	21
Round 3	**48**	**32**	**20**
Final	**48**	**32**	**20**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	29	29.2	10.2	45	48.0	5.8
Round 2	22	24.8	5.1	45	45.0	3.5
Round 3	**23**	23.9	3.6	**46**	46.2	2.7
Recommended	**23**			**46**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.0	0.7
SEMedian	1.2	0.9
SEM (Test)	5.4	5.4
SEMedian + SEM (Test) (SEComposite)	5.5	5.5

MI-Access v1.5 Participation - ELA Grade 11

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	53	24	23
Round 2	53	24	23
Round 3	**48**	**33**	**19**
Final	**48**	**33**	**19**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	23	26.5	10.9	42	45.6	7.9
Round 2	23	21.9	6.6	42	43.6	5.2
Round 3	**19**	19.9	4.4	**44**	44.9	3.9
Final	**19**			**44**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.2	1.1
SEMedian	1.5	1.3
SEM (Test)	5.5	5.5
SEMedian + SEM (Test) (SEComposite)	5.7	5.7

Appendix O: MI-Access Participation v1.5 Mathematics - Panel Results by Round

MI-Access v1.5 Participation - Math Grade 3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	40	15	45
Round 2	40	20	40
Round 3	**38**	**26**	**36**
Recommended	**38**	**29**	**33**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	18	18.9	7.8	31	32.9	11.5
Round 2	19	19.2	6.2	35	33.9	8.6
Round 3	**17**	17.2	6.2	**36**	36.0	8.9
Recommended	**17**			**38**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.7	2.4
SEMedian	2.1	3.0
SEM (Test)	5.9	5.9
SEMedian + SEM (Test) (SEComposite)	6.3	6.6

MI-Access v1.5 Participation - Math Grade 4

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	48	25	27
Round 2	48	24	28
Round 3	**44**	**29**	**27**
Final	**44**	**29**	**27**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	23	22.4	8.9	41	39.0	10.0
Round 2	23	23.5	6.5	40	39.9	7.6
Round 3	**20**	21.2	6.6	**41**	40.9	4.6
Final	**20**			**41**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.8	1.2
SEMedian	2.2	1.5
SEM (Test)	5.8	5.8
SEMedian + SEM (Test) (SEComposite)	6.2	6.0

MI-Access v1.5 Participation - Math Grade 5

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	52	28	20
Round 2	54	26	20
Round 3	**52**	**30**	**18**
Final	**52**	**30**	**18**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	25	26.5	13.3	43	41.5	10.6
Round 2	26	26.9	7.6	43	42.6	7.9
Round 3	**24**	25.0	8.6	**45**	43.5	6.3
Final	**24**			**45**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.3	1.7
SEMedian	2.9	2.1
SEM (Test)	5.7	5.7
SEMedian + SEM (Test) (SEComposite)	6.4	6.1

MI-Access v1.5 Participation - Math Grade 6

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	54	14	32
Round 2	55	20	25
Round 3	**51**	**26**	**23**
Final	**51**	**26**	**23**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	24	23.9	11.2	37	36.3	12.0
Round 2	26	25.3	6.0	42	39.9	7.2
Round 3	**23**	22.1	7.4	**44**	41.1	7.6
Final	**23**			**44**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.0	2.0
SEMedian	2.5	2.5
SEM (Test)	5.6	5.6
SEMedian + SEM (Test) (SEComposite)	6.1	6.1

MI-Access v1.5 Participation - Math Grade 7

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	57	20	23
Round 2	58	22	20
Round 3	**57**	**24**	**19**
Final	**55**	**26**	**19**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	26	27.9	11.7	42	39.1	11.2
Round 2	28	28.7	7.3	44	43.5	6.2
Round 3	**26**	25.5	7.4	**45**	43.9	6.6
Final	**24**			**45**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.0	1.8
SEMedian	2.5	2.2
SEM (Test)	5.8	5.8
SEMedian + SEM (Test) (SEComposite)	6.3	6.2

MI-Access v1.5 Participation - Math Grade 8

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	47	29	24
Round 2	56	21	23
Round 3	**50**	**30**	**20**
Final	**50**	**30**	**20**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	27	30.9	13.1	44	42.6	10.3
Round 2	32	31.7	8.9	46	45.6	6.4
Round 3	**28**	27.9	9.2	**49**	46.5	5.7
Final	**28**			**49**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.5	1.5
SEMedian	3.1	1.9
SEM (Test)	5.6	5.6
SEMedian + SEM (Test) (SEComposite)	6.4	5.9

MI-Access v1.5 Participation - Math Grade 11

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	59	17	24
Round 2	55	22	23
Round 3	**54**	**26**	**20**
Final	**54**	**26**	**20**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	32	33.0	11.2	46	45.5	8.7
Round 2	29	29.7	8.7	47	45.8	6.7
Round 3	**28**	28.6	8.5	**49**	47.1	5.2
Final						

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.3	1.4
SEMedian	2.8	1.7
SEM (Test)	5.3	5.3
SEMedian + SEM (Test) (SEComposite)	6.0	5.6

Appendix P: MI-Access Supported Independence v1.5 ELA - Panel Results by Round

MI-Access v1.5 Supported Independence - ELA Grade 3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	9	20	71
Round 2	14	23	63
Round 3	**18**	**23**	**59**
Recommended	**18**	**37**	**45**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	17	17.6	9.8	32	32.8	8.9
Round 2	21	22.8	7.2	37	36.8	7.6
Round 3	**24**	24.4	8.1	**41**	39.7	7.5
Recommended	**24**			**43**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.2	2.0
SEMedian	2.7	2.5
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.6	5.5

MI-Access v1.5 Supported Independence - ELA Grade 4

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	19	21	60
Round 2	19	24	57
Round 3	**23**	**39**	**38**
Final	**23**	**39**	**38**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	29	26.6	11.2	40	40.2	7.7
Round 2	29	28.5	7.2	43	43.0	7.6
Round 3	**30**	29.7	6.9	**47**	44.7	6.7
Final	**30**			**47**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.8	1.8
SEMedian	2.3	2.2
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.4	5.4

MI-Access v1.5 Supported Independence - ELA Grade 5

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	26	21	53
Round 2	26	23	51
Round 3	**27**	**36**	**37**
Final	**27**	**36**	**37**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	32	31.2	14.6	47	45.6	10.8
Round 2	32	32.2	8.7	47	47.3	7.3
Round 3	**33**	33.8	6.6	**49**	48.6	4.2
Final	**33**			**49**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.8	1.1
SEMedian	2.2	1.4
SEM (Test)	4.8	4.8
SEMedian + SEM (Test) (SEComposite)	5.3	5.0

MI-Access v1.5 Supported Independence - ELA Grade 6

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	11	25	64
Round 2	21	14	53
Round 3	**21**	**40**	**39**
Final	**21**	**40**	**39**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	15	18.8	10.5	36	33.5	9.6
Round 2	22	21.9	6.7	35	36.7	7.5
Round 3	**23**	25.0	7.6	**41**	39.8	7.6
Final	**23**			**41**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.0	2.0
SEMedian	2.5	2.5
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.5	5.5

MI-Access v1.5 Supported Independence - ELA Grade 7

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	16	44	40
Round 2	25	35	40
Round 3	**25**	**41**	**34**
Final	**25**	**41**	**34**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	21	23.6	10.7	43	40.3	8.5
Round 2	27	27.1	8.1	43	43.3	7.5
Round 3	**27**	29.3	6.6	**45**	44.7	6.0
Final	**27**			**45**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.8	1.6
SEMedian	2.2	2.0
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.4	5.3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	43	32	25
Round 2	31	43	26
Round 3	**31**	**43**	**26**
Recommended	**27**	**41**	**32**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	36	30.6	13.9	49	46.4	9.2
Round 2	30	30.9	9.7	48	46.7	7.5
Round 3	**30**	33.1	8.8	**48**	47.9	6.3
Recommended	**29**			**47**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	2.3	1.7
SEMedian	2.9	2.1
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.7	5.3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	15	39	46
Round 2	25	28	47
Round 3	**25**	**41**	**34**
Final	**25**	**41**	**34**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	22	24.4	10.8	43	40.9	11.4
Round 2	29	29.5	7.6	42	44.2	6.7
Round 3	**29**	30.3	6.5	**47**	46.6	5.3
Final	**29**			**47**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	14	14
SEMean	1.7	1.4
SEMedian	2.2	1.8
SEM (Test)	4.6	4.6
SEMedian + SEM (Test) (SEComposite)	5.1	4.9

Appendix Q: MI-Access Supported Independence v1.5 Mathematics - Panel Results by Round

MI-Access v1.5 Supported Independence - Math Grade 3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	20	17	63
Round 2	20	23	57
Round 3	**17**	**33**	**50**
Recommended	**17**	**39**	**44**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	20	18.4	4.9	31	31.5	7.4
Round 2	20	21.3	4.8	34	35.3	6.2
Round 3	**19**	18.5	3.9	**39**	40.1	5.6
Recommended	**19**			**41**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	1.0	1.4
SEMedian	1.3	1.8
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.1	5.2

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	25	27	48
Round 2	20	26	54
Round 3	**19**	**41**	**40**
Final	**19**	**41**	**40**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	26	26.7	6.0	40	41.3	5.7
Round 2	24	25.6	7.6	38	39.3	6.6
Round 3	**23**	21.7	4.0	**44**	43.3	5.2
Final	**23**			**44**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	1.0	1.4
SEMedian	1.3	1.7
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.1	5.2

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	38	28	34
Round 2	21	25	54
Round 3	**18**	**48**	**34**
Final	**18**	**48**	**34**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	36	34.5	9.0	49	49.9	5.6
Round 2	26	29.2	7.9	41	42.7	7.1
Round 3	**25**	24.7	4.2	**48**	46.7	4.5
Final	**25**			**48**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	1.1	1.2
SEMedian	1.4	1.5
SEM (Test)	4.8	4.8
SEMedian + SEM (Test) (SEComposite)	5.0	5.0

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	22	28	50
Round 2	28	27	45
Round 3	**21**	**43**	**36**
Final	**21**	**43**	**36**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	17	16.9	7.4	30	30.4	8.3
Round 2	20	20.2	7.2	33	33.3	6.4
Round 3	**16**	16.1	3.6	**37**	37.4	5.5
Final	**16**			**37**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	0.9	1.4
SEMedian	1.2	1.8
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.0	5.2

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	32	28	40
Round 2	27	28	45
Round 3	**21**	**49**	**30**
Final	**21**	**49**	**30**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	25	25.6	8.2	38	38.2	7.5
Round 2	22	23.9	8.8	34	36.4	7.6
Round 3	**19**	18.8	4.3	**42**	42.0	5.9
Final	**19**			**42**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	1.1	1.5
SEMedian	1.4	1.9
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.1	5.3

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	54	25	21
Round 2	33	33	34
Round 3	**21**	**37**	**42**
Recommended	**21**	**42**	**37**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	36	34.2	12.3	48	46.5	9.2
Round 2	24	28.7	10.7	42	40.8	8.9
Round 3	**19**	18.5	3.9	**39**	40.1	5.6
Recommended	**19**			**41**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	1.0	1.4
SEMedian	1.3	1.8
SEM (Test)	4.9	4.9
SEMedian + SEM (Test) (SEComposite)	5.1	5.2

MI-Access v1.5 Supported Independence - Math Grade 11

Percent of Students by Performance Category			
	Emerging	Attained	Surpassed
Round 1	17	40	43
Round 2	17	36	47
Round 3	**17**	**52**	**31**
Final	**17**	**52**	**31**

Activity Score Cuts (Maximum Activity Score = 60)						
	Attained			Surpassed		
	Median	Mean	SD	Median	Mean	SD
Round 1	21	26.7	12.1	43	43.5	10.0
Round 2	21	26.1	10.3	41	42.7	9.6
Round 3	**21**	21.1	2.6	**46**	45.5	3.5
Final	**21**			**46**		

Round 3 Summary Statistics		
	Attained	Surpassed
Number of Judges	15	15
SEMean	0.7	0.9
SEMedian	0.8	1.1
SEM (Test)	4.8	4.8
SEMedian + SEM (Test) (SEComposite)	4.9	4.9