

Spring 2017 M-STEP Test Administration Manual (TAM)

April 14, 2017

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How to Use This Manual

Introduction

This manual is intended to help those involved with administering the Michigan Student Test of Educational Progress (M-STEP) assessments understand (1) how the administration process works from beginning to end, (2) key dates when specific assessment activities take place, (3) the roles that school personnel play in the administration process, and (4) how to use available supports and accommodations.

This manual is divided into eight sections:

- **Important Dates** gathers calendarrelated information in one place to help school personnel prepare for, schedule, and administer the tests.
- Overview describes general information that everyone involved in the M-STEP administration process needs to know, including District M-STEP Coordinators, Building M-STEP Coordinators, Test Administrators, Technology Coordinators, and other relevant school personnel.
- **District Coordinators** covers information specific to fulfilling the role of a District M-STEP Coordinator before, during, and after testing.
- **Building Coordinators** covers information specific to fulfilling the role of a Building M-STEP Coordinator before, during, and after testing.

- Test Administrator covers information specific to fulfilling the role of a Test Administrator. (Please note that this section does not include actual test directions; those can be found in separate manuals for administering the online and paper/pencil tests.)
- Supports and Accommodations discusses the numerous supports and accommodations available to students when taking the M-STEP tests, as well as how and when to use them and where to obtain additional information.
- Materials Return Instructions describes in detail how to return secure materials to the M-STEP contractor for scoring, as well as how to handle non-scorable materials.
- **Appendices** includes detailed information on the state's calculator policy, the incident reporting guide, a direct link to the eDIRECT User Guide, and a list of important dates for 2017 M-STEP.

Everyone involved in M-STEP testing must read the Important Dates, and Overview sections of the manual. They also must read the section (or sections) related specifically to their role(s) in the test administration process. All other sections are optional; however, it is strongly encouraged that educators read the entire manual, if time permits, to better understand how their role fits into the overall administration process. The following table shows which sections of the manual must be read by whom, as well as where to find those sections.

Role	Required Sections	Page
District Coordinator	Important DatesOverviewDistrict CoordinatorBuilding Coordinator	8 12 32 42
Building Coordinator	 Important Dates Overview Building Coordinator Test Administrator Supports and Accommodations Materials Return Instructions 	8 12 42 57 67 81
Test Administrator	 Important Dates Overview Test Administrator Supports and Accommodations 	8 12 57 67

The M-STEP assessments are administered primarily online. However, there are two instances in which they may be administered using paper/pencil versions of the test: (1) when required to meet an individual student's needs, or (2) when a waiver has been applied for by a school and approved by the Michigan Department of Education (MDE). November 23, 2016, was the last date by which schools could apply for Spring 2017 waivers. Since this manual provides information on both types of test administration (online and paper/pencil), the MDE has developed two icons—a computer to represent online testing and a pencil to represent paper/pencil testing. When a section of the manual applies only to **one mode** of testing, the corresponding icon will appear. Sections without icons pertain to both online and paper/pencil testing.

Icon Mode				
	Paper/Pencil			
	Online			

Important Dates

Although many of these dates are mentioned elsewhere in the manual, the Michigan Department of Education (MDE) thought it was important to have one place where readers could go to find all of the key dates related to M-STEP testing. Please feel free to print, copy, and distribute these pages to others involved in the testing process.

(NOTE: A complete list of dates encompassing the entire 2017 M-STEP administration cycle can be found in Appendix E on page 104.)

Spring 2017 Testing Schedule for Summative Assessments																
								Wee	ek of							
	2/6- 2/10	2/13- 2/17	2/20- 2/24	2/27- 3/3	3/6- 3/10	3/13- 3/17	3/20- 3/24	3/27- 3/31	4/3- 4/7	4/10- 4/14	4/17- 4/21	4/24- 4/28	5/1- 5/5	5/8- 5/12	5/15- 5/19	5/22- 5/26
M-STEP Grades 5, 8, and 11											4 w	eeks				
M-STEP Grades 3, 4, 6, and 7														4 w	eeks	
MI-Access Alternate Assessments													7 week	s		
College Entrance: SAT with Essay										4/11 only		4/25 only				
Accommodations Testing*										4,	/11 – 4/2	25				
Work Skills: ACT WorkKeys										4/12 only		4/26 only				
Accommodations Testing										4,	/12 – 4/2	26				
PSAT**										4/11 or 4/12		4/25 or 4/26				
Accommodations Testing*										4,	/11 – 4/2	25				
WIDA ACCESS for ELLs 2.0		•	•	7 weeks	5	•	•									
WIDA Alternate ACCESS for ELLs				7 weeks	5											

* Only students who appear on the Non-standard Accommodation Report (NAR) are eligible to test within the 2-week window. Students approved for testing over two days must be tested on consecutive days.

** Schools can elect to administer the PSAT test to 9th graders on one day, 10th graders on the other day, or test both grades on the same day. As long as all students in the **same grade** are tested on the **same day**, schools can choose which date works best for them for both the initial test dates and the makeup test dates.

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Paper/Pencil Test Dates

	Grades 3, 4, 6 and 7						
	May 2017						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
	1	2	3	4	5	6	
		Day 1	Day 2	Makeup ELA	Makeup ELA		
7	8	9	10	11	12	13	
	Makeup ELA	MATH Day 1	MATH Day 2	SCIENCE	Makeup any content area		
14	15	16	17	18	19	20	
		Makeu	p - any cor	ntent area			
21	22	23	24	25	26	27	
28	29	30	31				

April 2017						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	ELA Day 1	ELA Day 2	ELA Day 3	Makeup ELA	15
16	Makeup ELA	MATH Day 1	MATH Day 2	SOCIAL STUDIES	Makeup any content area	22
23	24	Makeup	- any cont	tent area	28	29
30						

Grades 5 and 8

Grades 9 and 10						
		A	pril 201	.7		
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
		PSAT	PSAT			
16	17	18	19	20	21	22
23	24	25	26	27	28	29
		PSAT	PSAT			
30						

Grade 11							
April 2017							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
						1	
2	3	4	5	6	7	8	
9	10	SAT	ACT WorkKeys	M-STEP SCI/SS	Makeup SCI/SS	15	
16	17 Ma	h 18 akeup SCIE	I9 NCE/SOCI	AL STUDI	21 S	22	
23	24 M	Makeup SAT akeup SCI	26 Makeup ACT WorkKeys ENCE/SOC	IAL STUDI	28 ES	29	
30							

2)

	Important Pre-Testing A	ctivities				
M-STEP Pre-ID	Opens: January 9, 2017 Closes for preprinted barcode labels (paper/pencil testers): February 14, 2017					
Window	Closes for online test session pull: Remains open for new students th	Closes for online test session pull: February 14, 2017 Remains open for new students through the last day of the				
M CTER Initial	grade-specific test window					
Order Window	January 9–February 14, 2017					
M-STEP Additional Order Window	Grades 5, 8 and 11: April 4–April 25, 2017 Grades 3, 4, 6 and 7: April 25–May 16, 2017					
M-STEP Spring Coordinator Live and Taped WebEx	February 28, 2017 (live) The recorded version will be available in eDIRECT on March 4, 2017 (This Webex relates only to online testing)					
Spring 2017 M-STEP Test Recorded Presentations	Released in chapters on the M-STEP web page starting by early March.					
M-STEP Initial Test Materials Arrive in Districts	Grades 5, 8 and 11: March 27–29, 2017*	Grades 3, 4, 6 and 7: April 24–26, 2017				

* For grades 5, 8 and 11, schools may request an alternate delivery date of April 3–5 via the Alternate Initial Materials Delivery Request survey. Alternate delivery dates for grades 3, 4, 6 and 7 are April 24–26.Schools must complete the Alternate Delivery Request survey which is open January 9–February 3, 2017.which is open January 9–February 3, 2017.

Two other surveys being conducted by the OSA include: (1) the Off-site Test Administration Request survey, which opened on October 24, 2016 for grade/schoolwide testing and remains open for individual students (e.g., homebound, expelled, etc.) through the end of each grade-specific testing window; and (2) the Alternate INSIGHT Availability Request survey for schools that provide regular classroom instruction after 4:00 PM, which was open January 19–February 9, 2017.

Materials Return Dates				
Grades	Final date to ship without penalty and inclusion in Answer Document Verification	Shipping dates with \$250 late fee charge	Shipping dates with \$250 late fee and \$25 processing fee per Answer Document	Dates after which materials will NOT be scored
Grades 5, 8 and 11	May 3, 2017	May 4-10, 2017	May 17, 2017	May 18, 2017
Grades 3, 4, 6 and 7	May 24, 2017	May 25–31, 2017	June 7, 2017	June 1, 2017



Overview

M-STEP Assessments

The Spring 2017 Michigan Student Test of Educational Progress (M-STEP) includes summative assessments designed to measure student growth in English language arts (ELA), mathematics, science, and social studies. Each of these subject–area tests has unique characteristics.

English Language Arts

English language arts (ELA) is assessed in grades 3–8. It covers four claims: reading, writing, listening, and research. The assessments for grades 5 and 8 have two components: a test (computer adaptive, paper/pencil, administered over two days, or online fixed forms and video sign language) and a Performance Task. The tests for grades 3, 4, 6 and 7 have just one test (i.e., no Performance Task).

Listening

Listening is part of the ELA assessment for all students. Students testing online will be required to have headphones to hear the audio presented for this portion of the test. Paper/Pencil Test Administrators will receive a CD and a Listening Script that must be used for the Listening portion of the paper/ pencil assessment. Both of these materials are provided to Building M-STEP Coordinators; it is up to them to determine which method (CD or script) will be used in their building. Test administration directions are explicit and must be followed exactly as written.

If stand-alone CD players are not available to play the M-STEP ELA Listening CD for paper/ pencil testers, Test Administrators may use the CD player in a classroom computer **if the computer is equipped with speakers that enable each student to clearly hear the passages**. If there is any doubt about whether all students can hear each passage properly, the Listening Script should be used instead of the CD. Audio files (CDs) and Listening Scripts cannot be copied and must be returned with secure, non-scorable materials.

Once initial materials orders are placed, the Office of Assessment and Accountability (OSA) will send CDs and Listening Scripts to schools at a rate of one CD or Listening Script per 20 students. If necessary, additional CDs and scripts may be requested during the Additional Materials Order window (see page 89 of this manual for window dates). To determine the need for CDs in a particular building, first distribute the CDs and Listening Scripts within the school. Test Administrators need only one or the other, but not both. CDs and Listening Scripts can also be shared.

Mathematics

Mathematics is assessed in grades 3–8. It covers four claims: concepts and procedures, problem solving, communicating reasoning, and modeling and data analysis. The assessments at all grades have two components: a test (computer adaptive, paper/pencil, or online fixed form, video sign language, and stacked Spanish) and a Performance Task.

Calculator Policy

Calculator use varies by grade and assessment type (online or paper/pencil). Therefore, it is important for Test Administrators to understand the state's policy on their use.

• No Calculators Allowed in Grades 3, 4, and 5

Regardless of the type of test a student is taking (online or paper/pencil), calculators may **not** be used for any item on the mathematics grades 3, 4, and 5 assessments; their use would change the construct of the items, or what they are intended to measure. **All students must abide by this policy, even students whose Individualized Education Programs (IEPs) or Section** **504 Plans specify otherwise.** The use of a calculator at grades 3, 4, and 5 is considered a nonstandard accommodation, which will render the assessment invalid. If a student in one of these grades uses a calculator, his/her paper/pencil Answer Document should be bubbled "Nonstandard Accommodation" and returned with the scorable materials.

• Embedded Calculators Provided for Online Testers in Grades 6, 7, and 8

Students in grades 6, 7, and 8 taking an online test will use the calculator embedded in the online delivery engine. A basic calculator is provided for students in grade 6 (Calculator **only** performs basic functions; students must know order of operations for the M-STEP assessment.) and a scientific calculator is provided for students in grades 7 and 8.

Students taking a fixed-form accommodated online version of the mathematics test (including video sign language and stacked Spanish translations) will not be able to use a calculator at all times because the test is divided into two parts: one that does not permit the use of calculators, and one that does permit calculator use. In the first part of the test, the calculator will not be available in the tool bar; it will appear only when the student begins the calculator-permitted part. Students will **not** be allowed to go back and forth between the two parts of the test. (It should be noted that a student may ONLY use a hand-held calculator while taking an online test if it is required by his or her IEP or Section 504 Plan; otherwise, he or she MUST use the embedded online calculator.)

• Resources Available to Practice Using Embedded Online Calculators

The OSA has developed resources and tools for online testers to help prepare them for online testing. One of the resources is an online calculator practice tool. It is recommended that online testers visit the practice environment in <u>eDIRECT</u> (https:// mi.drcedirect.com). Once there, students can go to General Information \rightarrow Documents \rightarrow Document Type: Mini-Modules to see sample mathematics items and familiarize themselves with the tool.

• Calculator Use for Paper/Pencil Testers

Students in grades 6, 7, and 8 taking a paper/pencil test will use a hand-held calculator. Students in grade 6 will use a basic calculator, and students in grades 7 and 8 will use a scientific calculator. The test booklets are divided into three parts: Part 1 does **not** allow the use of calculators, but Parts 2 and 3 do. Once a student starts Part 2, he or she may not return to the non-calculator items in Part 1. Since external hand-held graphing calculators are programmable, there is potential for a security breach. Therefore, all programmable calculators must be set to TEST mode during testing sessions.

The state's full calculator policy may be found in Appendix A in case Coordinators and/or Test Administrators want to copy and share it in its entirety with others involved in testing mathematics.

Gridded Responses

In some cases, a grid is used to capture student responses on the paper/pencil mathematics assessments. For a description of response grids and a sample grid that may be duplicated for use with teacher-made tests throughout the school year, go to the <u>M-STEP</u> web page (www.michigan.gov/mstep).



L1 (First Language) Glossaries

Glossaries are available in a number of different languages for use on the paper/pencil mathematics tests. The following languages are available:

- Arabic (which can be ordered during Initial Materials Orders in the Secure Site or downloaded)
- Cantonese
- Eastern Punjabi
- Ilokano
- Korean
- Mandarin
- Russian
- Spanish (which can be ordered during Initial Materials Orders in the Secure Site or downloaded)
- Tagalog
- Ukrainian
- Vietnamese
- Western Punjabi

Stacked Spanish

"Stacked Spanish" refers to the presentation of one part of the item in Spanish followed by the same part in English. A stacked Spanish test is available for use on the mathematics online and paper/pencil tests for students who are fluent in Spanish but may need a parallel version to fully demonstrate what they know and are able to do. Spanish-speaking students are presented with both Spanish and English as they work through the test. It is possible that a Spanish-speaking student may not be able to read Spanish; in that case, the stacked Spanish could be used as a Spanish Reader Script by a qualified translator who follows the Spanish Read-Aloud Guidelines found on the M-STEP web page (www.michigan.

gov/mstep). The Spanish mathematics tests for online test takers should be selected in eDIRECT. For paper/pencil testing, the Spanish mathematics test booklet should be ordered as a material from the Secure Site and marked as a support on the student's mathematics Answer Document. (**NOTE:** Responses MUST be written/entered in English; those written or entered in Spanish will not be scored.)

M-STEP Multiplication Table

For students in grades four and above who have a need (such as a persistent calculation disability [e.g., dyscalculia]) that is documented in their Individualized Education Program (IEP) or Section 504 Plan, the OSA has developed the M-STEP Multiplication Table. It can be used for both the online and paper/pencil mathematics tests. The table can be found on the <u>M-STEP web page</u> (www. michigan.gov/mstep).

Science

For Spring 2017, the science GLCEs and HSCEs (2007) are assessed in grades 4, 7, and 11, with a fixed-form online or paper/pencil test. There are no Performance Tasks for this content area.

Social Studies

Social studies is assessed in grades 5, 8 and 11 with a fixed-form online or paper/pencil test. There are no Performance Tasks for this content area.

The Michigan Merit Examination

The Michigan Merit Examination (MME) is administered to students in eleventh grade (and eligible 12th-grade students). In Spring 2017, it consists of the SAT with Essay, ACT WorkKeys[™], and M-STEP summative assessments in science and social studies. To learn more about administering the MME, go to the <u>MME web page</u> (www.michigan.gov/mme).

ELA and Mathematics Performance Tasks

A Performance Task (PT) is a multi-item task that is administered online (to online testers) or via a test booklet (to paper/pencil testers). It is designed to assess student understanding of ELA (grades 5 and 8 only) and mathematics (all grades 3–8) content and is aligned to Michigan's content standards.

For ELA PTs, students are asked to:

- 1. Review 3–5 pieces of source material (reading passages)
- Respond to 1 selected-response item and 2 short constructed-response items
- Complete one full-write essay (sometimes referred to as a long constructed or extended-response item).

For mathematics PTs, students will be asked to construct numerical responses, as well as written responses, to explain their answers.

ELA PTs for paper/pencil testers will be administered on Day 3 of ELA testing and on Day 2 of mathematics testing (the PTs are included in the student's test booklet). For online testers, the PTs require separate test tickets.

Any notes taken while completing the PT must be collected immediately following the session and securely destroyed. They may not be used during any other part of the test.

Scratch Paper Guidelines

Scratch paper use varies by test type, grade, and subject area.

Online Mathematics

Scratch paper is allowed in all test sessions and on all test parts. For students in grades 6–8, **blank graph** paper, which can serve as scratch paper, is required and provided in the online material order. Additional graph paper can be downloaded from the <u>M-STEP web page</u> (www.michigan.gov/mstep).

For grades 3–5, **scratch** paper may be **blank** ruled, unruled, or graph paper. Testers in grades 6–8 must use only **blank graph** paper.

Online ELA, Science, and Social Studies

Scratch paper is allowed in all test sessions and on all test parts. For all grades, scratch paper must be **blank** ruled or unruled paper.

Paper/Pencil Mathematics

Scratch paper is allowed in all test sessions and on all test parts. For grades 3–5, this must be **blank** ruled, unruled, or graph paper. Students in grades 6–8 may be provided **blank graph** paper in place of blank ruled or unruled paper; however, students may use the graphs in their test booklets to solve problems. If needed, graph paper can be downloaded from the <u>M-STEP web page</u> (www.michigan. gov/mstep).

Paper/Pencil ELA, Science, and Social Studies

For paper/pencil ELA, science, and social studies, scratch paper is allowed in all test sessions and on all test parts. For all grades, scratch paper must be **blank** ruled or unruled paper. (**NOTE**: There is adequate space for note taking in the test booklets.)



Scratch Paper is Secure

Used scratch paper is considered a **secure** material regardless of which test it is used for, and, therefore, must be handled like all other secure materials. Fresh scratch paper must be distributed at the start of each test session.

Handling Scratch Paper for Online Testers

Fresh scratch paper must be distributed at the start of each new test session. That is, when a student receives a new test ticket for log in, then a fresh sheet of scratch paper must be provided at that time. Once a test session is completed, used scratch paper must be returned with the test tickets to the Building Coordinator for secure shredding.

Students must write their names on the scratch paper. When students are provided a break, the scratch paper must be collected and securely stored with test tickets until testing resumes. If the scratch paper is clearly identified with each student's name, then the scratch paper may be redistributed when students resume testing within a test session. If not, fresh scratch paper is required.

Handling Scratch Paper for Paper/Pencil Testers

Fresh scratch paper must be distributed with each "part" of a test and students must write their names on the scratch paper. After students encounter a Stop Sign in the test booklets, scratch paper must be collected and securely stored until it can be returned with the rest of the test materials to the Building M-STEP Coordinator for shredding. If paper/pencil testers are provided a break not associated with a test part, then used scratch paper must be placed inside their closed test booklets.

For the state's full scratch paper policy, see Appendix B on page 90.

Supports and Accommodations

The Michigan Supports and Accommodations Manual and the Supports and Accommodations Table present appropriate accommodations, supports, identification processes, classroom considerations, and guidelines for all state assessments. The documents can be found on the <u>M-STEP web page</u> (www.michigan. gov/mstep).The guidance in the documents pertains to general education students, as well as English learners (ELs), students with disabilities (SWDs), and students who are considered ELs and are also identified as SWDs.

Some supports and accommodations for students require that they take paper/pencil versions of the tests. These tests must be specifically requested when ordering materials in the Secure Site.

Conversely, other supports and accommodations may require that a student take the test online. Identifying individual students requiring supports and/or accommodations who will test online must be done in eDIRECT. Remember that testing students online requires that a TSM be set up and that INSIGHT, the test engine, be installed.

Please see the Supports and Accommodations section on page 67 of this manual for more detailed information.

Resources for Students to Prepare for Testing

A number of resources and tools have been developed to help students gain valuable experience with testing. The resources for online testing may be accessed in the *Accessing Online Tools Training* mini-module available in <u>eDIRECT</u> (https://mi.drcedirect. com). Go to All Applications \rightarrow General Information \rightarrow Documents. Sample items and Performance Tasks for paper/pencil testers are available on the <u>M-STEP web page</u> (www. michigan.gov/mstep).

Available resources include:

- Grade-level Sample Item Sets
- Sample Performance Tasks
- Calculator Practice
- Online Tools Trainings (OTTs) for general education students
- OTTs for students using supports and accommodations
- Student Tutorials (for use with classrooms of students to provide an overview of what they will practice using the OTTs)

It is highly recommended that schools provide students with opportunities to practice using these resources before they take the online or paper/pencil tests.

The Secure Site

Many testing functions take place on the <u>Secure Site</u> (https://baa.state.mi.us/ BAAsecure), including

- pre-identification of students
- test selection and test session creation
- ordering of paper/pencil test materials (and accompanying Return Materials Kits)
- printing of barcode labels for paper/pencil answer documents (as necessary)
- incident reporting
- reviewing "Accountable Students and Test Verification" functions
- downloading the L1 (First Language) glossaries

If District or Building M-STEP Coordinators do

not have a Secure Site user ID and password (which are required to enter the site), they should contact their district administrator (as assigned by the District Superintendent), who has responsibility for maintaining the site at the district level.

A user must have a MEIS Login to log in to the Secure Site system. The Secure Site login screen will contain a link to the "Request MEIS ID" process. If the user has a MEIS ID but does not have access to the Secure Site, the system will display a screen to request access after logging on. Users requesting district, school administrator, and/or school user access will have the ability to submit a request using the request access screen.

Those who are unfamiliar with the Secure Site can find training resources on the <u>Secure</u> <u>Site Training web page</u> (www.michigan.gov/ securesitetraining).

Call Center Contact Information

The Division of Accountability Services (DAS), of which the OSA is a part, has a call center to help answer questions related to M-STEP testing. Agents are available to receive questions at the following toll-free phone number and email address during specific hours.

- Call: 1-877-560-8378
- Email: <u>BAA@michigan.gov</u>
- 12/1/2016-4/9/2017: 8:00 AM-5:00 PM (M-F)
- 4/10/2017-5/27/2017: 7:00 AM-5:00 PM (M-F)

The following table shows the options related to M-STEP testing that are available for selection when calling the DAS Call Center.



Торіс	Option
Known or suspected cheating or unethical testing practices on any state assessment	1
eDIRECT, INSIGHT, TSM, or online assessment tools	2
Secure Site, M-STEP, MI-Access, Accountability Reporting, or Educator Evaluations	3

OSA Communications with Schools and Districts

Keeping educators up to date regarding changes in assessment and accountability is critical. The OSA communicates with the field in a number of different ways, including:

- Spring 2017 webex (live and recorded) and video tutorials for online M-STEP Coordinators in <u>eDIRECT</u> (https:// mi.drcedirect.com) (online focus only)
- Spring 2017 M-STEP Test Administration recorded presentations (online and paper/ pencil testing information in chapters) will be available on the <u>M-STEP web page</u> (www.michigan.gov/mstep) by early March.
- A weekly newsletter called SPOTLIGHT. Sign up to receive the newsletter and/or read archived copies on the <u>M-STEP web</u> <u>page</u> (scroll down to General Information).
- The <u>M-STEP web page</u> (www.michigan.gov/ mstep)
- <u>eDIRECT</u> (https://mi.drcedirect.com)
- The "Announcement" page on the <u>Secure</u> <u>Site</u> (https://baa.state.mi.us/BAAsecure)
- Presentations at state conferences, including the Michigan School Testing Conference in February

Please check these sources regularly to stay up to date on assessment and accountability related issues and activities.

The Educational Entity Master (EEM)

The Educational Entity Master (EEM) is a repository that contains basic contact information for public schools, nonpublic schools, intermediate school districts, and institutions of higher education.

Because the EEM serves as the directory for identifying and linking educational entities with other data collection applications, it is imperative that districts and schools keep their information up to date. The OSA will use that information in various ways throughout the M-STEP testing process.

For the M-STEP administration it is especially important that shipping information, as well as District Coordinator, Building Coordinator, and Technology Coordinator contact information is accurate and up to date.

The EEM may be accessed on the <u>EEM web</u> <u>page</u> (www.michigan.gov/eem). The EEM may be viewed by anyone, but it can only be updated by the authorized district EEM user. This is usually, but not always, the district student pupil accounting person. Those who are unfamiliar with its many functions can find a number of helpful resources on the site.

M-STEP Roles and Responsibilities

District and school professional staff members play a key role in the fair and equitable administration of state assessments. While districts may adjust the roles and responsibilities to fit their size and organizational structure, all roles must be filled in some way. Each role may be carried out by one individual or split among several individuals. No function or responsibility, however, should be ignored.

There are four roles associated with M-STEP testing: District Coordinators, Building Coordinators, Test Administrators,

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and Technology Coordinators. Each of the first three roles has a section in this manual dedicated entirely to describing the responsibilities that must be carried out before, during, and after assessment administration. Technology Coordinators have a separate manual that provides detailed information on how to install and configure the software used for testing. It is called the Technology User Guide and can be found in <u>eDIRECT</u> (https://mi.drcedirect.com).

The District, Building, and Technology Coordinators should all be identified in EEM. Please note that while EEM will allow multiple entries for each role, **OSA only uses the most recent entry**.

Following is a brief description of each M-STEP role.

District Coordinators

District M-STEP Coordinators are responsible for overseeing **all** testing at the district level and acting as backup support at the school or building level. The person fulfilling this role must develop necessary testing policies, ensure that all other roles associated with testing are filled, lead professional development activities associated with testing, ensure that Building Coordinators and Test Administrators are aware of training opportunities for students, and so forth.

In addition, the person fulfilling this role must be identified in the EEM with current and accurate contact information.

For more detailed information, please see the District Coordinator section on page 32 of this manual.

Building Coordinators

Each school building involved with M-STEP testing (including alternative education programs, SEEs, and S2E2s) must have a Building M-STEP Coordinator. This person may be the school principal or another professional staff member. The Building M-STEP Coordinator is responsible for arranging training opportunities for Test Administrators and students, making all testing arrangements, developing test schedules based on the school's resources (i.e., available computers, testing rooms, etc.) and needs, and ensuring the overall integrity of the assessment process.

In addition, the person fulfilling this role must be identified in the EEM with current and accurate contact information. For more detailed information, please see the Building Coordinator section on page 42 of this manual.

Test Administrators

Test Administrators are responsible for preparing for and administering the M-STEP tests directly to students. Although there are separate manuals that contain test directions, this manual provides an overview of what Test Administrators are expected to do before, during, and after testing. For more detailed information on this role, please see the Test Administrator section on page 57 of this manual.

Technology Coordinators

Technology Coordinators (TCs) are responsible for numerous tasks related to the software used for testing (INSIGHT) and Testing Site Manager (TSM), a local caching system that securely caches test content and student responses. TCs must

- download and install INSIGHT and the TSM (if the school is new to online testing)
- verify that the latest versions of INSIGHT and the TSM are installed (if the school participated in online testing before, this may require that old programs be uninstalled)



- configure all devices used for testing in schools to communicate with the TSM (if not already done)
- be available during testing to troubleshoot and help Building M-STEP Coordinators and Test Administrators
- clear the TSM at the end of each testing window (this can be done daily, if desired, but only after testing is finished for the day)
- provide contact information to District and Building M-STEP Coordinators so they can easily request help in solving any technology issues that arise before, during, or after testing

The person fulfilling this role must be identified in the EEM with current and accurate contact information.

Valid, Equitable, and Ethical Assessment

In April 2016, the State Board of Education approved the revised *Assessment Integrity Guide*. This document, which is available on the <u>M-STEP web page</u> (www.michigan. gov/mstep), establishes ground rules for how each state-level assessment should be administered. It also includes information on roles and responsibilities, test preparation, administration irregularities, and security.

It is recommended that the *Assessment Integrity Guide* be downloaded from the web page and read prior to the Spring 2017 assessment cycle, as it contains specific information and directions for individuals based on their assessment responsibilities.

By following the guidelines in the *Assessment Integrity Guide*, schools ensure that

- students' test results are valid and reliable
- the testing context is equitable for all students
- all practices are ethical

OSA Security Compliance Forms

OSA Security Compliance Forms are available on the <u>M-STEP web page</u> (www.michigan. gov/mstep) and are also sent to schools and districts with their initial materials shipment. All staff involved in the administration of M-STEP tests must read and sign an OSA Security Compliance Form asserting that they (1) have read the required assessment materials related to their role in the M-STEP administration process, and (2) understand their role and responsibilities.

All OSA Security Compliance Forms must be returned to the District M-STEP Coordinator and kept on file for three years.

Students to be Tested

Public schools are required to test all of their students, however, testing for students who are home schooled or who attend nonpublic schools is optional.

Results from state-mandated assessments are a key component of Michigan's accountability system and are used to help the state fulfill federal requirements for educational accountability.

Following is a detailed description of testing requirements for students in various populations, locations, and unique circumstances.

Student Populations

Students with IEPs and Section 504 Plans

Special education students (also referred to as students with disabilities [SWDs]) must participate in the state's general education or alternate assessments, with or without accommodations as specified by subject area in their Individualized Education Program (IEP). Section 504 students must have accommodations identified in their Section 504 Plan. There may also be students who require designated supports during testing.

To learn more about the supports and accommodations allowed for these populations during M-STEP testing, see the *Michigan Supports and Accommodations Manual* and the *Supports and Accommodations Table* on the <u>M-STEP web page</u> (www.michigan.gov/ mstep). There also is a section of this manual dedicated to the topic (see page 67).

English Learners (ELs)

English learners (ELs) must participate in state assessment programs. ELs who are in their first year in a U.S. school (defined as the first twelve months of enrollment) may not be required to participate in the M-STEP ELA assessment **if** they have taken the WIDA ACCESS Placement Test or WIDA ACCESS for ELs. This flexibility is only allowed one time per student. In order to take advantage of the one time exemption, an issue must be submitted and approved in the Secure Site during the Verification of Not Tested window.

Student Grade Considerations

Students Who Repeat a Grade Level or are in Advanced Classes

Students must take the M-STEP test for the grade level in which they are enrolled. If a student takes a test that is in a grade different from the one identified for him/her in the Michigan Student Data System (MSDS), he/ she will be considered "**Out of Level**" and "**Not Tested**" for accountability purposes. The only opportunity to correct this mismatch is during the time allowed for student record maintenance.

12th Grade Students Not Previously Included in Accountability

Students in 12th grade who were not included in 11th-grade accountability (i.e., they skipped 11th grade) are required to take the complete MME (which includes M-STEP science and social studies). For additional information on MME eligibility please see the *Who Must/Can Take the Spring 2017 MME* document on the <u>MME web page</u> (www.michigan.gov/mme).

Students in Different Locations

Home-schooled Students

Home-schooled students are eligible for testing, but they are not required to test. If they opt to participate in testing, they must contact their local public school and arrange for their participation. Home-schooled students must also have a state-assigned unique identification code (UIC) and the correct residency code entered in the MSDS. Students are expected to follow the school-established test schedule (the school is not required to provide makeup testing).

When home-schooled students take the test, their test results will not be included in school and district test results **if** the student is appropriately flagged on the Answer Document (for paper/pencil testers) or in eDIRECT (for online testers). Those entries must match what is entered for the student in the MSDS.

When returning test results to home-schooled students, schools may request a stamped, self-addressed envelope from the parent.

Students Enrolled in Private/Non-public Schools

Private/non-public students are eligible for testing, but they are not required to test. If they opt to participate in testing, they may only take M-STEP tests at their own school, unless the students also take courses at a public school. In that case, students may take the M-STEP tests in the public school, but they MUST have the correct residency code entered in the MSDS or they will be included on the school's "Expected to Test" list and accountability calculations.



Virtual Schools

Students in online or virtual schools must be tested by those schools at a remote site. Virtual school personnel should plan to work closely with the OSA to ensure that testing at remote sites is managed in a secure fashion **Students may NOT be tested online in their homes or in any unproctored session. Test sessions must be proctored and may NOT have family or virtual proctors.** An offsite test administration request must be submitted and approved. You will need to complete this <u>request</u> <u>form</u> (https://baameap.wufoo.com/forms/ z1lu5n0l1dvl7kx/).

Shared Educational Entities (SEEs)/ Specialized Shared Educational Entities (S2E2s)

All information for students enrolled in SEEs or S2E2s will be based on MSDS enrollment information. All students are expected to test where they are enrolled. SEE schools and the schools that operate S2E2 classroom programs are responsible for handling all assessment and related verification processes in the Secure Site. These occur during various date windows and should be completed on behalf of the resident districts which the SEE/S2E2 serves. Only SEE schools and the schools that operate S2E2 classroom programs will be able to view and manage the SEE/S2E2 students in the Secure Site to ensure enrollment and demographics are correct. SEE schools and the schools that operate S2E2 classroom programs are the only entities that can view and submit issues for missing answer documents or not tested students.

Seat Time Waivers

Students receiving seat time waivers must be tested on the same dates, using the same guidelines as all other students.

Homebound and Hospitalized Students

Students who are homebound or hospitalized during the testing window must take paper/pencil M-STEP tests. An offsite test administration request must be submitted and approved. You will need to complete this request form (https://baameap.wufoo.com/ forms/offsite-test-administration-requestspring-2017/).

Students in Unique Circumstances

Suspended Students

Schools must test suspended students. Testing may occur in a separate location, such as an administration building, and may be given at a unique time within the established window. If students are tested off campus, an offsite test request should be filed.

Expelled Students

Schools are not expected to test expelled students unless the expulsion specifies "With Services;" however, MSDS enrollment information must reflect the expulsion status.

Students in Detention or Juvenile Facilities

A student's enrollment information in the MSDS determines who is responsible for administering the M-STEP. The Primary Education Providing Entity (PEPE) on the as-of date (May 27, 2017) will be the school held accountable for testing the student.

Accountability Considerations

Students Who Move Into a School During Testing

All students moving into a receiving school during the testing window must complete M-STEP tests for the grade level in which they are enrolled. This includes students who move into the school district from outside the state or country. Students moving from one Michigan school to another Michigan

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school may have completed one or more of the M-STEP tests in their previous school. To determine whether they have, use the following steps. (Do not rely on the student to confirm which tests he/she may or may not have taken.)

Directions for the receiving school:

- Contact the new student's former school principal and confirm which, if any, M-STEP tests the student completed prior to arriving in the receiving school. Students do not need to retake subject-area tests **if** the sending school confirms that all parts of the test have been completed. Maintain documentation.
- Verify whether the new student has an IEP, Section 504 Plan, or EL instruction documentation that specifies an alternate state assessment or any required supports and/or accommodations.
- If a new student has not started a previously scheduled M-STEP test, then administer the missed test(s) on a regularly scheduled makeup day for either paper/pencil or online tests.
- For all paper/pencil or online M-STEP tests scheduled on the day of or after the new student's arrival, administer tests according to the M-STEP schedule using the school-assigned test forms. This applies to any new student, including out-of-state students, previously homeschooled students, or transferring private school students.
- If the new student has started—but not completed—all parts of a previously scheduled M-STEP test, paper/pencil schools must administer one entire test using the school-assigned form. Online schools must assign and administer all sessions of the test.
- Pre-identify the student for M-STEP in the Secure Site.

- Ensure that the student's MSDS information and entry date into the school are correct.
- Be sure to generate, print, and affix barcode labels for the new student and attach one to each of his/her subject-area Answer Documents (paper/pencil).
- For accountability purposes, it is critical that the "Accountable Students and Test Verification" processes on the Secure Site are carefully reviewed for these students. Make sure the MSDS reflects accurate enrollment and exit dates.
- If assistance is needed to determine which online assessments a new student has taken in a previous school, contact Customer Support at 1-877-560-8378, Option 2.

Students Who Move Out of a School During Testing

Students who move out of a sending school during the test window create record-keeping challenges. The following steps should help school administrators ensure that such students do not adversely affect the school's test results and accountability.

Directions for the sending school:

- Do not send any test materials with the student to the new school. The sending school remains responsible for these materials.
- If the student has completed one or more paper/pencil M-STEP tests, return his/her Answer Document(s) with the rest of the school's scorable materials.
- If the student has started, but not completed, all parts of one or more subject-area M-STEP online tests, be sure to unassign the student in the Secure Site.



- If the student has started, but not completed, one or more subject-area M-STEP paper/pencil tests, write "Do Not Score" prominently across the front page of his/her Answer Document(s) along with the reason, and return the Answer Document(s) in the orange Special Handling Envelope provided by the M-STEP contractor.
- Be prepared to accept a call from the student's new school and to provide information on
 - which state assessments he/she has not yet taken
 - the status of test completion
 - any documented accommodations in the student's IEP, Section 504 Plan, or EL instruction documentation
- Ensure that the student is exited from the school on the correct date in the MSDS.

For accountability purposes, it is critical that the "Accountable Students and Test Verification" processes on the Secure Site are carefully reviewed for these students. Ensure the MSDS reflects accurate enrollment and exit dates.

Students Leaving for Extended Vacations

Although it is not possible to administer tests before the testing window opens or after it closes, please send an email to <u>baa@michigan</u>. <u>gov</u> to determine if there is any other way to assess students who are on vacation for the duration of the window. Schools and districts are held accountable for the participation of all students.

Unique Identification Codes

Each student in Michigan is assigned a unique identification code (UIC) when he or she enrolls in a public school. **Home-schooled**, **private**, **and non-public students are also required to have a UIC**. UICs are used to identify students and report their test results; therefore, it is vital that the codes are correctly applied.

Michigan Merit Examination

The Michigan Merit Examination (MME), which is administered to grade 11 students (and eligible students in grade 12), will consist of: (1) the SAT with Essay, (2) ACT WorkKeys, and (3) M-STEP science and social studies. Information on administering the SAT with Essay and ACT WorkKeys may be found on the MME web page (www.michigan.gov/mme).

Performance Tasks for ELA

ELA Performance Tasks will be administered once in elementary school (grade 5) and once in middle school (grade 8). Mathematics PTs will continue to be administered in grades 3–8.

Test Administration Windows Update

Each 2017 Test Administration window has been extended to provide schools more flexibility in testing. Instead of three three-week windows, there will now be two four-week testing windows. One week of overlap between the two testing windows allows the total testing time to remain seven weeks.

The first testing window, for grades 5, 8 and 11, will begin April 10, 2017 and end on May 5, 2017—four full weeks. The second testing window, for grades 3, 4, 6 and 7, will begin May 1, 2017 and end on May 26, 2017.

These adjustments will reduce the overall footprint that testing has in schools, while providing schools with flexibility to successfully administer the tests.

Transition Completed

In Spring 2015, the Michigan Department of Education (MDE) moved from the Michigan Educational Assessment Program (MEAP) to a new assessment system called the Michigan Student Test of Educational Progress (M-STEP). The M-STEP includes numerous summative assessments designed to measure students' proficiency in relation to the state's educational standards. Under the new system, English language arts (ELA) and mathematics are assessed in grades 3–8; social studies is assessed in grades 5, 8 and 11; and science GLCEs and HSCEs (2007) are assessed in grades 4, 7, and 11.

Now, the transition is complete. From here forward, there may be minor modifications to the M-STEP tests and how they are administered, but the overall testing system will remain the same.

Computer Adaptive Testing for ELA and Mathematics

The ELA and mathematics M-STEP tests in grades 3-8 will continue to use computeradaptive testing (CAT). This means that item presentation will vary depending on a student's responses. For example, if a student answers question one correctly, he or she will be presented with a more challenging second question than a student who answers question one incorrectly. In this way, the computer adjusts, or adapts, itself to each student. This is not true of science and social studies or of PTs; these will be tested using fixed forms (i.e., items will be presented in the same order, regardless of student responses).

Those students who take CATs may notice that when they get to the end of the test, they will receive a congratulatory message and need to click on an "Exit" button. There is no "End Test" button on the CAT like there is for fixedform online tests.

Closed Captioning Only for ELA Listening

Closed captioning is available only for the listening items on the ELA online assessments. It will not be available for any other ELA items or for the mathematics, science, or social studies tests.

English Glossaries

Based on feedback received from multiple stakeholder groups, the OSA has decided not to provide English glossaries for the ELA and mathematics paper/pencil tests. The decision was made after all groups indicated that (1) the glossaries were not particularly useful for students, and (2) it was difficult to determine which students might benefit from this support. The OSA will continue to re-evaluate all supports and accommodations on a yearly basis in an effort to improve access to state assessments.

Returning Answer Documents for Testers Using Braille or Enlarged Print

Transcribed Answer Documents for students using Braille or enlarged print versions of the test do **not** have to be returned in the orange Special Handling Envelope. Instead, they should be returned along with all other used Answer Documents, using the directions in the Materials Return Instructions section of this manual (see page 81).

🗏 Insight Availability

INSIGHT—DRC's Online Learning System, which provides a secure online testing environment—will only be available from 7:00 AM to 4:00 PM unless an Alternate INSIGHT Availability Request was submitted and approved by February 9, 2017.



Absences and Makeup Testing

All makeup testing **must be completed during the student's designated test window** (based on his/her grade). Being absent is not a reason for students not to test.

For online students who never started a test, there is no need to create a new test session for makeups. Students can remain in the same test session to which they were originally assigned. (For paper/pencil makeup test dates, see the Important Dates section on page 8 of this manual.)

Incident Reporting

Incident reports must be completed by District M-STEP Coordinators when

- requesting a new test (online or paper/ pencil)
- reporting a student who is resuming testing (paper/pencil only)
- reporting test irregularities and misadministrations
- marking a test "Do Not Score" (paper/ pencil only)
- marking a test "Prohibited Behavior"
- marking a test "Nonstandard Accommodation"

For more detailed information on situations requiring incident reports, see Appendix C on page 92 of this manual.

Testing Irregularities

Any irregularities that occur outside the scope of Appendix C must be reported to the DAS's Call Center as quickly as possible (1-877-560-8378). The DAS will work with the school to avoid marking tests as "**Do Not Score**." It is possible that an emergency test(s) will be required. If it becomes necessary to use an emergency test, there will be no charge for testing irregularities when self-reported by the district. However, a \$50 fee will be charged per scored subject-area test if the irregularity is **not** self-reported.

Examples of test irregularities include, but are not limited to:

- not removing from or covering posters, maps, and other instructional aids in the testing room(s)
- not allowing a student to complete a test (M-STEP tests are untimed, so time should not be a factor if scheduled properly)
- security breaches with test materials or Answer Documents
- allowing students to be unsupervised during testing

Training Tools

The OSA and its testing contractors have developed a number of resources to help staff prepare for test administration.

Recorded Presentations on the M-STEP Web Page

The following presentation is available in chapters on the $\underline{M-STEP}$ web page (www.michigan.gov/mstep). Go to Professional Development.

Recorded Presentation	Description	Date Available
M-STEP Online and Paper/ Pencil Test Administration Training	Covers information necessary to correctly administer the online and paper/pencil M-STEP assessments.	March 2017

Recorded Presentations in eDIRECT

The following presentations are available in <u>eDIRECT</u> (https://mi.drcedirect.com). Click on All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document Type: Training Presentations & FAQs.

Recorded Presentation	Description	Date Available
District and Building Coordinator Training (recorded)	Provides (a) an overview of what's new for Spring 2017, (b) where to find resources, (c) software required for the implementation of online testing, and (d) a Q&A.	February 28, 2017
Technology Coordinator Recorded Presentation	Provides an overview of the software and technology setup required for M-STEP and MI-Access Spring 2017 testing. It is <i>optional</i> viewing for District and Building Coordinators.	available now

Manuals

The following manuals are available in <u>eDIRECT</u> (https://mi.drcedirect.com). Click on All Applications \rightarrow General Information \rightarrow Documents).

Manual	Description	Where to find it	Date Available
M-STEP Test Administration Manual (TAM)	This manual (electronic only)	M-STEP web page and eDIRECT	March 2017
M-STEP Online Administration Directions	Online test administration directions for Test Administrators (printed booklet and electronic)	eDIRECT and M-STEP web page	available now
M-STEP Paper/Pencil Administration Directions	Paper/Pencil test administration directions for Test Administrators (printed booklet and electronic)	M-STEP web page	available now



Mini-tutorials (Online Administration Only)

Mini-tutorials are short videos designed to help District M-STEP Coordinators, Building M-STEP Coordinators, and Test Administrators better understand online testing tasks. They are available in <u>eDIRECT</u> (https://mi.drcedirect.com).

Mini-Tutorial	Description	Where to find it	Role	Date Available
Accessing Documents in eDIRECT	How to access, sort, and filter documents on the eDIRECT test management website	All Applications → General Informations → Documents → Document Type: Mini-Modules	All	February 27, 2017
Accessing Online Tools Trainings (OTTs) for Students	How to access OTTs—the student practice tests	All Applications → General Informations → Documents → Document Type: Mini-Modules	All	December 16, 2016
Searching for Students in eDIRECT	How to find students that have been pre-loaded into eDIRECT	All Applications → General Informations → Documents → Document Type: Mini-Modules	DC, BC	December 16, 2016
Accommodations: Adding, Editing, and Mass- Assigning	How to add, edit, and mass-assign accommodations to students' tests in eDIRECT	All Applications → General Informations → Documents → Document Type: Mini-Modules	DC, BC	December 16, 2016
Creating Test Sessions in eDIRECT	How to create and edit test sessions, and print test tickets	All Applications → General Informations → Documents → Document Type: Mini-Modules	DC, BC	December 16, 2016
Checking Student Test Status	How to check where students are in the testing process at any given time (not started, in progress, or completed)	All Applications → General Informations → Documents → Document Type: Mini-Modules	DC, BC	December 16, 2016

Security

All materials that contain test questions or student responses are considered secure materials and must be handled in a way that maintains their security before, during, and after testing. This includes paper/pencil materials, accommodated materials, used scratch paper, online test tickets, and test rosters. Following is more detailed information related to security that District M-STEP Coordinators, Building M-STEP Coordinators, and Test Administrators must keep in mind when they have secure test materials in their possession.

- Secure materials are bar-coded and recorded on the security checklists accompanying shipments. These materials must be returned to the scoring contractor.
 Schools should expect to account for every secure item provided on the materials list.
- Test tickets used to log students into each online test are considered secure materials and must be treated as such. (Test rosters, which automatically print along with test tickets, are also considered secure.)
- Paper/Pencil Answer Documents are considered secure and must be handled and protected accordingly. All UNUSED ELA and mathematics Answer Documents must be returned to the scoring contractor in a non-scorable box. UNUSED science and social studies Answer Documents can be securely shredded.
- All secure materials must be retained in one secure, locked location within the school. During the test administration window, they must be distributed and collected daily.
- All scratch paper (including graph paper) must be collected and returned to the Building M-STEP Coordinator, immediately

after testing, for shredding. No used scratch or graph paper may be kept in the classroom. Used scratch paper must never be taken from one test session to another.

- No test materials that contain test questions or student responses may be copied at any time or retained in the schools.
- Using cameras or cell phones and posting pictures to social media sites is an enormous security risk. Therefore, photographs may not be taken at any time by students or personnel. If students violate this policy, their tests will be marked as "Prohibited Behavior;" no emergency tests will be permitted.

Materials Permitted or Required During Testing

Calculators

For information on the state's calculator policy, see "Appendix A" on page 89 of this manual. Specific directions related to the use of both hand-held (paper/pencil) and embedded (online) calculators are also contained in the grade-level specific Test Administration Directions that are shipped to schools along with their other assessment materials.

Number 2 Pencils

Number 2 pencils are required for paper/pencil testing and are optional for online testing. If a different writing utensil is used on an Answer Document, it will be necessary to transcribe the answers onto a new Answer Document and follow these steps:

• For your protection, have the District or Building M-STEP Coordinator file an Incident Report.



- Affix a new barcode label for the student to a new Answer Document and fill out the student name, date of birth, and the district/school fields.
- Have the student transcribe his/her answers onto the new Answer Document.
- Write "**Do Not Score**" across the front page of the original Answer Document and place it in the orange Special Handling Envelope for return to the contractor.

Number 2 pencils should be made available to online test takers to use with scratch paper or graph paper.

Highlighters

- Highlighters are a universal tool.
- Highlighters are embedded in the online test engine (INSIGHT).
- Highlighters can be provided to paper/ pencil testers and may be used ONLY in the test booklet (never on the student's Answer Document).

If highlighters are used on a paper/pencil student Answer Document, follow these steps:

- For your protection, have the District or Building M-STEP Coordinator file an Incident Report.
- Affix a new barcode label for the student to a new Answer Document and fill out the student name, date of birth, and district/ school fields.
- Have the student transcribe his/her answers onto a new Answer Document in a one-on-one proctored session.
- Write "**Do Not Score**" across the front page of the original Answer Document and place it in the orange Special Handling Envelope for return to the contractor.

Additional Paper

- Scratch paper is allowed for both the online and paper/pencil tests.
- Graph paper will be provided to online testers in grades 6–8 for the mathematics test. Paper/pencil testers may write on the graphs that are printed in their test booklets.
- The school may choose to provide additional graph paper to paper/pencil testers; however, no formulas, reference materials, or information of any kind can appear on that paper.
- Under no circumstances can used scratch paper, graph paper, or notes be taken from one test session or test part to another.
- All scratch paper and graph paper must be collected immediately after testing, returned to the Building Coordinator, and securely shredded.

For more detailed information on scratch paper, see the "Spring 2017 M-STEP Scratch Paper Policy" section in Appendix B on page 90 of this manual.

Headphones

- Headphones are required for (1) ELA online listening items, (2) online testers needing text-to-speech accommodations, and (3) students using CDs or DVDs as an accommodation or support for paper/pencil science and social studies.
- Students may use their own headphones or earbuds, but Test Administrators should check them to ensure they are working properly.

CDs/DVDs

• CD/DVD players may be used for students using CDs or DVDs as an accommodation or support for paper/pencil science and social studies. CD players may also be used for the listening part of the paper/pencil ELA test. A script of the listening part is also provided if the school prefers to have someone read that part of the ELA test aloud to students.

• Additional information about the use of CDs and DVDs can be found in the Supports and Accommodations section on page 67 of this manual.

Dictionaries and Thesauri

Students in grades 5 and 8 may use a dictionary and/or thesaurus for the full write portion of the ELA Performance Task. These tools are embedded in the online assessment, but they must be provided to students taking the paper/pencil test. Simply use the dictionaries/thesauri typically used during instruction. Dictionaries and thesauri cannot be shared.

Software and Testing Devices

eDIRECT (https://mi.drcedirect.com)

eDIRECT is Data Recognition Corporation's (DRC's) custom-built web application that allows Michigan users to access training materials, download testing software, manage online test sessions, print test tickets, assign and manage online testing accommodations, and monitor testing progress. Each eDIRECT user will receive his/her own login information and password with specific permissions based on his/her role as entered in the Secure Site. eDIRECT is used in connection with DRC's online test engine, INSIGHT.

INSIGHT and Testing Site Manager

DRC's INSIGHT Online Learning System is software that provides a secure online testing environment. The software is available from eDIRECT and must be installed on each device used for testing. In addition, a testing site manager (TSM) is needed to (1) allow the audio components of the test to function properly, and (2) ensure a smooth and secure testing environment. The TSM also reduces bandwidth consumption and provides backup response storage in the event of network issues. Please see the *Technology User Guide* available in <u>eDIRECT</u> (https://mi.drcedirect. com) for additional details.

Supported Testing Devices

Students may test using the following devices:

- Windows-based desktops or laptops
- Mac-based desktops or laptops
- iPads
- Non-touchscreen Chromebooks, Chromeboxes, and Chromebases
- Android OS and some Android devices
- Select touchscreen devices, including Acer C720P, Lenovo N20P, Dell Chromebook 11, and HP Chromebook 14 G3.

Please refer to the *Technology User Guide* or "DRC INSIGHT System Requirements" available in <u>eDIRECT</u> (https://mi.drcedirect. com) for more detailed information about supported devices and versions.

Testing Devices/Operating Systems Not Supported

Thin Clients (for any test with audio) are **not** supported for Spring 2017 testing. Neither is Windows XP. Please refer to the Technology User Guide for more detailed information on these devices.



District Coordinators

Roles and Responsibilities

District M-STEP Coordinators are responsible for overseeing all testing in their district. Specifically, they are expected to perform the following functions:

- Establish and communicate a district scratch paper policy
- Establish and communicate a district cell phone and personal electronic device policy
- Lead test-related staff training activities and inform Building M-STEP Coordinators about learning opportunities for Test Administrators and students
- Manage Secure Site access and permissions
- Manage the distribution, collection, and storage of OSA Security Compliance Forms
- Serve as the contact person between the district and the OSA
- Read and know where to find information related to testing
- Disseminate all correspondence to relevant district and school staff members, as well as parents where and when appropriate
- Coordinate the pre-identification of students, ordering, and distribution of test materials
- Collaborate and communicate regularly with the Technology Coordinator (who is responsible for installing all software needed for testing)
- Ensure the Technology Coordinator has cleared the TSM at the end of each test window
- Ensure all student information is accurate in the Michigan Student Data System (MSDS)

- Ensure all information in the EEM is complete and accurate, such shipping addresses, test-related roles (District Coordinator/Building Coordinator/ Technology Coordinator), and all contact information. (If multiple roles are identified in EEM, **only the most recent role is used by OSA**.)
- Serve as backup support for Building M-STEP Coordinators before, during, and after testing
- Initiate and submit Incident Reports as needed
- Investigate and inform the OSA of any testing irregularities, including prohibited behavior, the use of nonstandard accommodations, and security breaches
- Oversee and ensure the timely return of all secure materials for scoring (see the "Materials Return Dates" table on page 39 for important shipping dates), as well as the handling of non-scorable test materials
- Verify Accountable Students and Test Verification after testing

Assigning Roles for District Users

One of the most important tasks that District M-STEP Coordinators must complete is providing key personnel in the assessment process (Technology Coordinators, District Coordinators, and Building Coordinators) access to eDIRECT. To do that, District Coordinators must first work with their District Administrator (the person in the district who provides others with access to the Secure Site and assigns their role). User information will then be pulled from the Secure Site and loaded into eDIRECT. **Please note** that this is the only method for adding users to the eDIRECT system. Users may **not** be added manually over the phone. Technology Coordinators will need access to eDIRECT to download testing software. Building Coordinators will need eDIRECT access to manage online test sessions, assign accommodations, and print test tickets. District Coordinators will need access to it to monitor testing progress and serve as backup support for Building Coordinators. Test Administrators do not need access to the password protected part of eDIRECT to obtain the materials they might need.

A document titled Assigning Roles in the Secure Site for eDIRECT and AMS is available on the Secure Site Training web page (www. michigan.gov/securesitetraining) under the "Quick Reference" section. It is designed to help District M-STEP Coordinators, working in cooperation with their District Administrator, make assignments. Once a user is entered into the Secure Site, it will take approximately two business days before he/she receives an email from eDIRECT with username and password information.

Everyone, including Test Administrators, has access to the "Documents" section of <u>eDIRECT</u> (https://mi.drcedirect.com) as it does not require a login (click on All Applications \rightarrow General Information \rightarrow Documents).

Pre-Identification of Students (Secure Site)

On January 9, 2017, the Division of Accountability Services (DAS) pre-identified students for M-STEP using the Fall 2016 MSDS General Collection and Student Record Maintenance (SRM) files. A Pre-ID Student Report was then made available to schools on January 9, 2017. It is the responsibility of the district/school to review the report and take the following actions:

• Ensure that all students in grades 3–8 and 11 are pre-identified in the Pre-ID Student Report from January 9, 2017.

- Remove, or unassign, students who have exited the school or are taking the MI-Access assessment (the state's alternate assessment). Please note that students who are unassigned from testing are not removed from accountability calculations, just from testing. To remove a student from accountability calculations, the student must be exited in the MSDS in the Spring 2017 MSDS General Collection or an SRM collection.
- Assign any new students to M-STEP testing who have enrolled since the fall MSDS General Collection (student count day).

Barcode labels will be printed and shipped by the contractor for students who were preidentified as M-STEP paper/pencil testers in the Secure Site by 5:00 PM, February 14, 2017. Schools administering the paper/ pencil tests will be required to print barcode labels from the Secure Site for students pre-identified AFTER that date.

Ordering Test Materials

It is up to the district to determine who will handle placing orders for paper/pencil test materials, either the District or the Building M-STEP Coordinator. The same information on ordering materials is included here and in the Building M-STEP Coordinator section of this manual so that both parties have the information necessary to complete the relevant tasks.

Initial Materials Orders

All test materials orders are placed in the <u>Secure Site</u> (www.michigan.gov/baa-secure) during a specific time frame. For Spring 2017, Initial Materials Orders began on January 9th and will conclude on February 14th. The numbers entered in the site dictate which materials in what quantities are shipped to districts/schools for paper/pencil and some accommodated testers.



To ensure that materials are ordered and shipped to the correct location, the person responsible for placing orders must verify on the Initial Order Screen in the Secure Site that both the shipping address and the Coordinator's name are correct. If the information is incorrect, it must be updated in the EEM by the authorized district EEM user (usually the Student Pupil Accounting person) by no later than 5:00 PM on February 14, 2017.

Instructions for Initial Materials Orders can be found on the training page of the <u>Secure Site</u> (www.michigan.gov/securesitetraining). Click on "Initial Materials Order" under the Quick References section.

Additional Materials Orders

During the Additional Materials Order window, schools and districts can order extra materials if necessary. For Spring 2017, these windows are as follows:

- April 4–April 25 for grades 5, 8 and 11
- April 25–May 16 for grades 3, 4, 6 and 7

Supports and Accommodations

Some supports and accommodations for students require that they take paper/pencil versions of the tests. **These tests must be specifically requested when ordering materials in the Secure Site** (www. michigan.gov/baa-secure).

Conversely, other supports and accommodations may require that a student take the test online. **Identifying the supports and/or accommodations that an individual student needs to test online must be done in eDIRECT**.

Training Requirements and Resources

District M-STEP Coordinators should review and become familiar with all sections of this manual. They also should make others in the district aware of the many training tools that are available to help Building M-STEP Coordinators, Test Administrators, and students prepare for testing.

Training Opportunities for Staff

The following training presentations are provided to assist testing personnel:

- District and Building Coordinator Training WebEx
 - Live on 2/28/17
 - A recorded version will be available
 3/4/17 in <u>eDIRECT</u> (https://mi.drcedirect. com). Go to All Applications → General
 Information → Documents → Document
 Type: Training Presentations and FAQs.
 - District/Building Coordinator Power Point available 3/4/17 in <u>eDIRECT</u> (https:// mi.drcedirect.com). Go to All Applications
 → General Information → Documents → Document Type: Training Presentations and FAQs.
- Spring 2017 M-STEP Test Administration recorded presentations (online and paper/ pencil testing information in chapters) on the <u>M-STEP web page</u> (www.michigan.gov/ mstep)
- Recorded Technology Coordinator Training WebEx available now in <u>eDIRECT</u> (https:// mi.drcedirect.com). Go to All Applications
 → General Information → Documents → Document Type: Training Presentations and FAQs.

- 2017 Supports and Accommodations Refresher Webinar Recording materials can be accessed from the <u>M-STEP</u> <u>web page</u> (www.michigan.gov/mstep) under **Students Supports and** Accommodations:
 - Powerpoint for Refresher Webinar Presentation
 - Supplemental Slides for New Test Coordinators (not included in video)

🗏 Online Student Tutorials

Online Student Tutorials are designed to be viewed with students in a classroom environment to provide an overview of the INSIGHT testing engine and tools. It is a companion activity that prepares students for the Online Tools Trainings (OTTs). They are **not** a substitute for the hands-on practice that the OTTs provide. The tutorials are available in two places: (1) in <u>eDIRECT</u> (https:// mi.drcedirect.com), go to All Applications \rightarrow General Information \rightarrow Tutorials (a login is **not** needed), or (2) by opening the INSIGHT testing engine and selecting the tutorial link at the bottom of the screen.

Online Tools Training (OTT) for Students

Online Tools Trainings (OTTs) give students opportunities to see what different test items look like and to practice using the online testing tools.

OTTs are available to practice before testing software is installed, on the <u>OTT portal</u> (https://wbte.drcedirect.com/MI/portals/mi/). If Chrome is not your default browser, you will need to copy and paste this address into a CHROME web browser.

- All ELA, math, science, and social studies OTTs
- Calculator practice module

- Masking accommodation
- Color choices/contrasting color/reverse contrast accommodations
- Stacked Spanish translation accommodation (for mathematics)
- All ELA OTTs are available online, using Chrome
- Text-to-speech (TTS) accommodation
- Video Sign Language (VSL) accommodation

Although it is the responsibility of the Building Coordinator to schedule opportunities for students to practice using the OTTs, District Coordinators need to spread the word about their availability and importance. Providing students with ample practice opportunities will ensure they are familiar with the test content, item types, navigation strategies, and system tools on test day. See the Building Coordinator section (page 42) for more information about accessing OTTs.

Loading Students in eDIRECT

Students **cannot** be loaded directly into eDIRECT. Instead, follow the procedures established to pre-identify students in the Secure Site. Then, once they are entered there, it will take about one business day for them to be loaded into eDIRECT.



Assigning/Editing Sessions

While Building M-STEP Coordinators are primarily responsible for assigning students to test sessions, District Coordinators may be called on to provide backup. Therefore, the following information (which is repeated in the Building Coordinator section on page 42 of this manual) will be helpful.

- Schools administering assessments online can group students into online sessions on the Secure Site from January 9, 2017– February 27, 2017. This is true for all students, whether they were pre-identified by the district/school or by the OSA.
- Assignments to online sessions must be completed by 5:00 PM on February 27, 2017. Instructions for completing this task can be found on the <u>Secure Site Training</u> <u>web page</u> (http://www.michigan.gov/ securesitetraining). Click on "Spring 2017 Online Sessions" located under the Quick Reference section.
- After the February 27, 2017, deadline, pre-identified students will be pulled in their online session groups from the Secure Site and automatically entered into eDIRECT. Beginning March 7, 2017, schools will need to place new students into a session directly in eDIRECT. Pre-identified students will continue to be pulled twice a day starting March 7, 2017.

Resumed Testing

Resumed testing only applies to students tested with paper/pencil. Online students who do not complete testing in the scheduled testing time may continue testing at a later time or date with their test ticket.

For test security reasons, paper/pencil students are expected to complete all testing on the designated day unless they are a) absent, or b) provided the multiple-day testing designated support which allows for intentional scheduling for some students who use additional supports. The paper/pencil tests have been restructured to allow ample time for all students to complete required testing in one day. It is incumbent upon the Building Coordinator to consider the needs of all students, including those who might require additional time, when building test schedules. OSA recommends testing begins as early as feasible in the school day to accommodate students who need additional time.

Students may resume testing in the following situations:

- student goes home sick
- student is removed from school by a parent or guardian for an appointment

When this happens, the following must be done:

- flag the last item answered; the student may not go back to previously answered questions
- resume testing on a make-up day in a one-on-one proctored session

Reporting Decisions

District M-STEP Coordinators need to make two important decisions **before** testing that will impact the reporting of results.

Research I and II Fields

The use of research fields is optional. Research codes are reported in the student data file results only. (Dynamic online reports do not include the research code information.)

In the past, school districts have used the optional research fields to answer such questions as:

• Is there a relationship between the number of years students have attended school in our district and their test scores?

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• Is there a difference in attainment of achievement objectives among those students who had reading program A vs. reading program B (vs. reading program C, etc.)?

The following important points should be considered before deciding to use research fields:

- Codes for research fields may be developed at the district or school level and assigned a different number from one to ten.
- Districts may elect to use one or both of the research code options at any or all of the grades assessed.
- Research codes can be filled in on the Answer Document or entered into the Secure Site through the end of Tested Roster.

If research codes are used, District M-STEP Coordinators need to inform Building Coordinators and Test Administrators so they can be entered either on the students' Answer Documents or added in the Secure Site before the end of Tested Roster.

Reporting Codes

Reporting codes (optional) allow districts and schools to receive reports organized by class or group designation(s). It is up to the district or school to determine whether this option will be used and to define the codes that will be most helpful. If these codes are used, District M-STEP Coordinators must inform Building M-STEP Coordinators so they, in turn, may inform Test Administrators of the 4-digit code selected.

Reporting codes must either be entered on the students' Answer Documents or added in the Secure Site before the end of Tested Roster.

End-of-Test Window Activities

There are a number of tasks that must be completed at the end of each test window. Although District M-STEP Coordinators may not complete the tasks themselves, they are responsible for making sure that others do.

Returning Test Materials

Either the District or Building M-STEP Coordinator needs to return test materials to the M-STEP scoring contractor **at the end of each test window**. Detailed directions for this task are included in the Materials Return Instructions section on page 81 of this manual. (See the table on the following page for return deadlines.)

Clearing the TSM

District M-STEP Coordinators should work with Building M-STEP Coordinators to remind Technology Coordinators that the TSM needs to be cleared of any stored responses at the end of each online testing window. If Technology Coordinators choose to, they may clear the TSM on a daily basis. Usually the TSM would only need to be cleared at the end of the day after all testing has been completed, however if students are having problems logging into tests, the TSM may be cleared more frequently.

Once a testing session starts caching responses on the TSM, it will continue doing so until the student logs out. There is no benefit to repeatedly manually pushing responses from a student who is still testing. There is also no harm. If a student cannot log back into a test because responses are waiting on the TSM, it is simplest to send all pending responses to DRC.



Important Dates

	Important Pre-Testing A	ctivities	
M-STEP Pre-ID	Opens: January 9, 2017 Closes for preprinted barcode labels (paper/pencil testers): February 14, 2017		
Window	Closes for online test session pull: February 14, 2017		
	Remains open for new students th grade-specific test window	rough the last day of the	
M-STEP Initial Order Window	January 9–February 14, 2017		
M-STEP Additional Order Window	Grades 5, 8 and 11: April 4–April 25, 2017 Grades 3, 4, 6 and 7: April 25–May 16, 2017		
M-STEP Spring Coordinator Live and Taped WebEx	February 28, 2017 (live) The recorded version will be available in eDIRECT on March 4, 2017 (This Webex relates only to online testing)		
Spring 2017 M-STEP Test Recorded Presentations	Released in chapters on the M-STEP web page starting by early March.		
M-STEP Initial Test Materials Arrive in Districts	Grades 5, 8 and 11: March 27–29, 2017*	Grades 3, 4, 6 and 7: April 24–26, 2017	

* For grades 5, 8 and 11, schools may request an alternate delivery date of April 3–5 via the Alternate Initial Materials Delivery Request survey. Alternate delivery dates for grades 3, 4, 6 and 7 are April 24–26.Schools must complete the Alternate Delivery Request survey which is open January 9–February 3, 2017.which is open January 9–February 3, 2017.

Two other surveys being conducted by the OSA include: (1) the Off-site Test Administration Request survey, which opened on October 24, 2016 for grade/schoolwide testing and remains open for individual students (e.g., homebound, expelled, etc.) through the end of each grade-specific testing window; and (2) the Alternate INSIGHT Availability Request survey for schools that provide regular classroom instruction after 4:00 PM, which was open January 19–February 9, 2017.

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Materials Return Dates						
Grades	Final date to ship without penalty and inclusion in Answer Document Verification	Shipping dates with \$250 late fee charge	Shipping dates with \$250 late fee and \$25 processing fee per Answer Document	Dates after which materials will NOT be scored		
Grades 5, 8 and 11	May 3, 2017	May 4-10, 2017	May 17, 2017	May 18, 2017		
Grades 3, 4, 6 and 7	May 24, 2017	May 25-31, 2017	June 7, 2017	June 1, 2017		

District Coordinator Online Checklist

A single-page checklist is provided on the following page to help District Coordinators manage the many tasks that must be completed for M-STEP online testing. The checklist can be also be downloaded from eDIRECT (https://mi.drcedirect.com). Click on All Applications \rightarrow General Information \rightarrow Documents.





Spring 2017 Online Assessments

District Coordinator Checklist of REQUIRED ONLINE TASKS AND ACTIVITIES



2017 M-STEP Test Windows			
Grades 5, 8 and 11 April 10- May 5			
Grades 3, 4, 6 and 7	May 1—May 26		

eDIRECT: https://mi.drcedirect.com

Access reference documents in eDIRECT: Select All Applications \rightarrow General Information \rightarrow Documents \rightarrow filter for M-STEP documents. (All documents should be posted by Friday, March 4, 2017. Check back for updates.)

District Coordinator Checklist:

This checklist is intended to be used *in conjunction* with the **M-STEP Test Administration Manual**, which is found in eDIRECT. **All steps below are required for successful implementation**.

✓		Task
	1.	Watch the District/Building Coordinator Online Webex (Live 2/28/17) or a recording of the Webex (posted by 3/1/17) in eDIRECT under All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document type: Training Presentations & FAQs and at www.michigan.gov/mstep
	2.	Review and become familiar with the Assessment Integrity Guide, the Michigan Supports and Accommodations Manual, the M-STEP Test Administration Manual, and paper/pencil or online Test Administration Directions posted online at www.michigan.gov/mstep
	3.	Ensure all Building M-STEP Coordinators have been trained and that all students taking online assessments have opportunities to practice using training materials
	4.	Coordinate student use of Online Tools Trainings (OTTs) and the M-STEP Tutorial
	5.	Assign Secure Site access and permission to Technology Coordinators and Building M-STEP Coordinators who will manage the Student Roster on eDIRECT and update incorrect/missing information in the Secure Site
	6.	Oversee the scheduling, creation, and editing of Test Sessions by Building M-STEP Coordinators in eDIRECT

✓	Task
	 Oversee the printing, sorting, and distribution of Student Test Login Tickets to Test Administrators
	8. Monitor testing and support Technology Coordinators, Building M-STEP Coordinators, and Test Administrators during the testing window
	9. Monitor testing and support Test Administrators during testing window (daily)
	10. Report all test administration irregularities and submit Incident Reports, as needed
	11. Order and oversee all emergency tests
	12. Assist with the ordering, distributing, security, and return of all test materials, as needed
	13. Post-Test Housekeeping —Ensure that all test tickets, test rosters, scratch paper, and graph paper have been collected and destroyed; verify that student statuses show "completed" for each student (eDIRECT: Student Management → Student Status); monitor makeup sessions for students as needed

Questions Regarding eDIRECT, INSIGHT, or the above steps?

- Consult the M-STEP Test Administration Manual
- Call the DAS Call Center: 1-877-560-8378 (choose option 2)



Building Coordinators

Roles and Responsibilities

Building M-STEP Coordinator responsibilities include, but are not limited to, the following:

- Distribute and discuss district cell phone and personal electronic device policy with Test Administrators
- Distribute and discuss district scratch paper policy with Test Administrators
- Serve as the contact person between the school and the District M-STEP Coordinator
- Read and become familiar with the information in this manual prior to testing
- Carry out building-level duties related to the distribution, security, and collection of test materials
- Schedule and conduct training of Test Administrators (online and paper/pencil)
- Schedule and coordinate student test practice, including viewing the Student Tutorials and use of Online Tools Trainings (OTTs)
- Ensure student data in the Michigan Student Data System (MSDS) is completed and up to date
- Work with the District M-STEP Coordinator to order and distribute paper/pencil and accommodated test materials
- Ensure students are assigned to online test sessions
- Assign the appropriate accommodations to students in eDIRECT (online)
- Schedule and coordinate testing during each testing window
- Ensure that rooms used for testing do not contain any visual materials that would provide students with clues or answers to questions
- Print and distribute student test tickets before each test

- Control test ticket, test roster, test booklet, and Answer Document security
- Collect tickets, test rosters, scratch paper, and glossaries, for destruction after each test session
- Ensure that each Answer Document has

 a barcode label, and (2) the necessary
 information printed on the front page (a
 \$10 fee may be assessed for each Answer
 Document returned without a label)
- Mark paper/pencil tests "**Do Not Score**" on the Answer Document as necessary
- Report any incidents promptly to the District M-STEP Coordinator so that he/she may file an Incident Report
- Ensure the Technology Coordinator has cleared the TSM at the end of each testing window (this can be done on a daily basis if desired, but only AFTER all students are finished testing for the day)
- Return materials as directed after each test window is complete
- Complete Accountable Students and Test Verification activities as directed

Pre-Identification of Students (Secure Site)

On January 9, 2017, the Division of Accountability Services (DAS) pre-identified students for the M-STEP using the Fall 2016 MSDS General Collection and Student Record Maintenance (SRM) files. A Pre-ID Student Report was made available to schools on January 9, 2017. It is the responsibility of the district/school to review the report and take the following actions:

• Ensure that all students in grades 3–8 and 11 are pre-identified in the Pre-ID Student Report from January 9, 2017.

- Remove, or unassign, students who have exited the school or are taking the MI-Access assessment (the state's alternate assessment). Please note that students who are unassigned from testing are not removed from accountability calculations, just from testing. To remove a student from accountability calculations, the student must be exited in the MSDS in the Spring 2017 MSDS General Collection or an SRM collection.
- Assign any new students to M-STEP testing who have enrolled since the fall MSDS General Collection (student count day).

Barcode labels will be printed and shipped by the contractor for students who were preidentified as M-STEP paper/pencil testers in the Secure Site by 5:00 PM, February 14, 2017. Schools administering the paper/ pencil tests will be required to print barcode labels from the Secure Site for students pre-identified after that date.

Ordering Test Materials

It is up to the district to determine who will handle placing orders for paper/pencil and accommodated test materials, either the District or the Building M-STEP Coordinator. The same information on ordering materials is included here and in the District M-STEP Coordinator section of this manual so that both parties have the information necessary to complete the relevant tasks.

Initial Materials Orders

All test materials orders are placed in the <u>Secure Site</u> (www.michigan.gov/baa-secure) during a specific time frame. For Spring 2017, Initial Materials Orders began on January 9th and will conclude on February 14th. The numbers entered in the site dictate which materials in what quantities are shipped to districts/schools for paper/pencil and some accommodated testers. To ensure that materials are ordered and shipped to the correct location, the person responsible for placing orders must verify on the Initial Order Screen in the Secure Site that both the shipping address and the coordinator's name are correct. If the information is incorrect, it must be updated in the Educational Entity Master (EEM) by the authorized district EEM user (usually the Student Pupil Accounting person) by no later than 5:00 PM on February 14, 2017.

Instructions for Initial Materials Orders can be found on the <u>Secure Site training web page</u> (www.michigan.gov/securesitetraining). Click on "Initial Materials Order" under the Quick References section.

Additional Materials Orders

During the Additional Materials Order window, schools and districts can order extra materials if necessary. For Spring 2017, these windows are as follows:

- April 4–April 25 for grades 5, 8 and 11
- April 25-May 16 for grades 3 and 6

Supports and Accommodations

Some supports and accommodations for students require that they take paper/pencil versions of the tests. **These tests must be specifically requested when ordering materials in the** <u>Secure Site</u> (www. michigan.gov/baa-secure).

Conversely, other supports and accommodations may require that a student take the test online. **Identifying the supports and/or accommodations that an individual student needs to test online must be done in eDIRECT**.

Training Requirements and Resources

Building M-STEP Coordinators should review and become familiar with all sections of this manual. They also should make others in the district aware of the many training tools that are available to help Test Administrators and students prepare for testing.

Training Opportunities for Staff

The following training presentations will be provided to assist testing personnel:

- District and Building Coordinator Training WebEx
 - Live on 2/28/17
 - A recorded version will be available
 3/4/17 in <u>eDIRECT</u> (https://mi.drcedirect.
 com). Go to All Applications → General
 Information → Documents.
 - District/Building Coordinator Power Point available 3/4/17 in <u>eDIRECT</u> (https:// mi.drcedirect.com). Go to All Applications
 → General Information → Documents → Document Type: Training Presentations and FAQs.
- Spring 2017 M-STEP Test Administration recorded presentations (online and paper/ pencil testing information in chapters) on the <u>M-STEP web page</u> (www.michigan.gov/ mstep)
- Recorded Technology Coordinator Training WebEx available now in <u>eDIRECT</u> (https:// mi.drcedirect.com). Go to All Applications
 → General Information → Documents → Document Type: Training Presentations and FAQs.
- 2017 Supports and Accommodations Refresher Webinar Recording materials can accessed from the <u>M-STEP web page</u> (www. michigan.gov/mstep) under **Students Supports and Accommodations**:

- Powerpoint for Refresher Webinar Presentation
- Supplemental Slides for New Test Coordinators (not included in video)

🗏 Online Student Tutorials

Online Student Tutorials are designed to be viewed with students in a classroom environment to provide an overview of the INSIGHT testing engine and tools. It is a companion activity that prepares students for the Online Tools Trainings (OTTs). They are **not** a substitute for the hands-on practice that the OTTs provide. The tutorials are available in two places: (1) in <u>eDIRECT</u> (https:// mi.drcedirect.com), go to All Applications \rightarrow General Information \rightarrow Tutorials (a login is **not** needed), or (2) by opening the INSIGHT testing engine and selecting the tutorial link at the bottom of the screen.

Online Tools Training (OTT) for Students

Online Tools Trainings (OTTs) give students opportunities to see what different test items look like and to practice using the online testing tools.

OTTs are available to practice before testing software is installed, on the <u>OTT portal</u> (https://wbte.drcedirect.com/MI/portals/mi/). If Chrome is not your default browser, you will need to copy and paste this address into a CHROME web browser.

- All ELA, math, science, and social studies OTTs
- Calculator practice module
- Masking accommodation
- Color choices/contrasting color/reverse contrast accommodations
- Stacked Spanish translation accommodation (for mathematics)

- All ELA OTTs are available online, using Chrome
- Text-to-speech (TTS) accommodation
- Video Sign Language (VSL) accommodation

Building M-STEP Coordinators are responsible for scheduling opportunities for students to practice using the OTTs. The more opportunities they have to practice, the more familiar they will be with the item types, navigation strategies, and system tools on test day.

Loading Students in eDIRECT

Students **cannot** be loaded directly into eDIRECT. To add students in eDIRECT, follow the procedures established to pre-identify students in the Secure Site. Once that has been completed, students will be imported into eDIRECT about one business day later.

Assigning/Editing Sessions

Building M-STEP Coordinators are responsible for assigning students to test sessions; however, District Coordinators may be called upon to provide backup. For that reason, the following information is included in this section and in the District Coordinator section of this manual (page 32). Be sure to clarify who will perform this important function for the school in Spring 2017.

- Schools administering assessments online will need to group students into online sessions on the Secure Site. This is true for all students, whether they were preidentified by the district/school or by the Office of Assessment and Accountability (OSA).
- Assignments to online sessions must be completed by 5:00 PM on February 27, 2017. Instructions for completing this task can be found on the <u>Secure Site Training</u>

web page (http://www.michigan.gov/ securesitetraining). Click on "Spring 2017 Online Sessions" located under the Quick Reference section.

After the February 27, 2017, deadline, pre-identified students will be pulled in their online session groups from the Secure Site and automatically entered into eDIRECT. Beginning March 4, 2017, schools will need to place new students into a session directly in eDIRECT. Pre-identified students will continue to be pulled twice a day starting March 7.

For detailed information on adding and editing test sessions, refer to the *Test Sessions*— *Adding, Editing, Printing Test Tickets* guide and mini-module found in <u>eDIRECT</u> (https://mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents.

Assigning Supports and Accommodations

The Spring 2017 M-STEP online assessments offer two kinds of supports and accommodations-embedded and non-embedded. Embedded supports and accommodations are those that are integrated into the online testing system. They are referred to as "online" accommodations in eDIRECT. **Please note** that the system does not clearly identify which options are designated supports and which are accommodations. This information can be found in the Supports and Accommodations Table on the M-STEP web page (www. michigan.gov/mstep). These supports and accommodations need to be turned on by the Building M-STEP Coordinator in eDIRECT **before** the student's test ticket is generated. Non-embedded accommodations are those that are not available within the test engine, such as noise buffers or having a teacher read the items aloud to a student. In eDIRECT,

accommodations that are not available in the test engine are called "standard" accommodations. These eDIRECT "standard" accommodations are **not** the same as the state definitions of standard and nonstandard accommodations. Please refer to the *Supports and Accommodations Table* for more information on the state definitions of standard and nonstandard accommodations.

For detailed information on assigning accommodations, refer to the *Accommodations—Adding, Editing, Mass-assigning* guide and mini-module found in <u>eDIRECT</u> (https://mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document Type: Mini-Modules.

🗏 Test Ticket Printing

Each student will require a test ticket for every online test session. (Building Coordinators may want to print test tickets for each session on a different color paper to reduce potential confusion about which test tickets to use when.) Each test ticket has a username and a unique password.

The following tests have two parts and will require two test tickets:

- science (grades 4 and 7)
- social studies (grades 5 and 8)

The following tests have one part and will require one test ticket:

- ELA
- ELA performance task (grades 5 and 8)
- mathematics
- mathematics performance task
- science (grade 11)
- social studies (grade 11)

Refer to the following chart to determine the number of test tickets required for each session.

Test Tickets by Grade				
Grade Total Non-Ac Number Ass of Tickets (# 0		Non-Accommodated Assessments (# of tickets)		
3	3	ELA (1), math (1), math PT (1)		
4	5	ELA (1), math (1), math PT (1), science (2)		
5	6	ELA (1), ELA PT (1), math (1), math PT (1), social studies (2)		
6	3	ELA (1), math (1), math PT (1)		
7	5	ELA (1), math (1), math PT (1), science (2)		
8	6	ELA (1), ELA PT (1), math (1), math PT (1), social studies (2)		
11	2	science (1), social studies (1)		

A test roster will print with each set of test tickets. If a roster is not desired, it is possible to print only the tickets by adjusting the print settings to leave off the first 1–2 pages of the document. (Both the test tickets and test roster are secure materials.)

Sample Test Tickets

Please note that each test ticket will have a unique password. Following are examples of test tickets for a two-part test.

M-STEP Spring 2017 Test Ticket

G 7 Science - Part 1

Test Session: Smith Student Name: Anderson, Abigail A Date of Birth: 11/11/2000 State Student ID (UIC): 1234567890 District Student ID: 9483722 Username: AAnderson1 Password: 234K79HQ Accommodation(s): MSK

For detailed information on printing test tickets, refer to the *Test Sessions—Adding*, *Editing*, *Printing Test Tickets* guide and mini-module found in <u>eDIRECT</u> (https://mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document Type: Mini-Modules.

M-STEP Spring 2017 Test Ticket

G 7 Science - Part 2

Test Session: Smith Student Name: Anderson, Abigail A Date of Birth: 11/11/2000 State Student ID (UIC): 1234567890 District Student ID: 9483722 Username: AAnderson1 Password: 234K79HQ Accommodation(s): MSK

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Creating Testing Schedules

Before testing begins, Building M-STEP Coordinators should develop a testing schedule for the school. To that end, the OSA has prepared estimates of the time it expects each test component to take, as shown in the tables below. (**Please note** that the overall time is the same for both online and paper/pencil tests, although the latter tests have different test sessions/parts.)

Spring 2017 M-STEP tests are untimed and student paced. Therefore, students must be given as much time as needed to complete each session or part of the test. You may expect some students will complete the test

D)

in less time than estimated while others may require additional time. Be sure to plan for both contingencies.

Estimated test session times do **not** include the following:

- traveling to and from the testing room
- distributing and collecting test tickets, test booklets, answer documents, scratch paper, and when allowed, calculators
- signing into the test session
- reviewing online or paper/pencil test directions or sample items with students
- completing the first page (demographic page) of the answer document

Spring 2017 Test Session Timings Grades 3–8						
Subject	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
ELA Computer Adaptive	1:30	1:30	1:30	1:30	1:30	1:30
ELA Performance Task	NA	NA	2:00	NA	NA	2:00
Math Computer Adaptive	1:30	1:30	1:30	2:00	2:00	2:00
Math Performance Task	1:00	1:00	1:00	1:00	1:00	1:00
Science Part 1	NA	0:50	NA	NA	0:50	NA
Science Part 2	NA	0:50	NA	NA	0:50	NA
Social Studies Part 1	NA	NA	0:50	NA	NA	0:50
Social Studies Part 2	NA	NA	0:50	NA	NA	0:50
Estimated Total Hours	4:00	5:40	7:40	4:30	6:10	8:10

Spring 2017 Test Session Timings - High School

Subject	Grade 9	Grade 10	Grade 11
Science	NA	NA	0:50
Social Studies	NA	NA	0:50

NOTE: Times are in hours:minutes. For example, 1:30 equals 1 hour and 30 minutes.

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Managing Student Test Tickets

Test tickets and rosters are secure materials. Once printed, they should be kept in a secure location until the test session is scheduled to begin. Test Administrators are instructed to distribute test tickets just prior to student login, and to collect test tickets after all students have logged in and begun testing. **Only one test ticket should be distributed at a time; students should not have access to any test ticket other than the test the student is currently taking.**

After a testing session is complete, the Test Administrator should return all test tickets (and rosters, if printed) to the Building M-STEP Coordinator for

- destruction (**if** all students have finished the test), or
- secure storage (**if** students have not completed the test).

If a student must take a break from testing and the break exceeds 20 minutes, a test ticket will be required to resume testing. If a student cannot finish a single assessment on the same day in which it was started, the Test Administrator should collect the student's test ticket and store it in a secure place for redistribution on the next testing day. All test tickets must be destroyed once the test is complete.

Testing Status

If Building M-STEP Coordinators need to check a student's testing status, they can do so in eDIRECT. The following table defines the status notations that are used.

Status	Description		
Not Started	Student has not started this test		
In Progress	Student began this test during the current school day or is currently testing		
Completed	Student completed and submitted the test or clicked "End Test"		

Testing Irregularities

If there are any irregularities that occur before, during, or after testing, report them to the District M-STEP Coordinator as soon as possible. (See Appendix C for examples of what is considered an irregularity and what follow-up may be required.)

If the irregularity occurs with a paper/pencil tester, the Building M-STEP Coordinator will need to mark the student's Answer Document "**Do Not Score**." If, however, the irregularity occurs with an online tester, the Building Coordinator must work with the District Coordinator to complete an Incident Report. Once the report is filed, the OSA will enter "**Do Not Score**" codes in eDIRECT.

Resumed Testing

Resumed testing only applies to students tested with paper/pencil. Online students who do not complete testing in the scheduled testing time may continue testing at a later time or date during the test window with their test ticket.

For test security reasons, paper/pencil students are expected to complete all testing on the designated day unless they are absent or provided the multiple-day testing designated support which allows for intentional scheduling for some students who use additional supports. The paper/pencil tests have been restructured to allow ample



time for all students to complete required testing in one day. It is incumbent upon the Building Coordinator to consider the needs of all students, including those who might require additional time, when building test schedules. OSA recommends testing begins as early as feasible in the school day to accommodate students who need additional time.

Students may resume testing in the following situations:

- student goes home sick
- student is removed from school by a parent or guardian for an appointment

When this happens, the following must be done:

- flag the last item answered. The student may not go back to previously answered questions
- resume testing on a make-up day in a one-on-one proctored session

Video Surveillance Cameras

If a school has surveillance video cameras in the computer lab(s), or any other room it will use for testing, it can create a security issue. However, in the interest of student and staff safety, the use of surveillance cameras during testing is allowed. Cameras should be directed at equipment and test materials in such a way that they do not compromise any test items or student responses. Then, once testing is complete, any tapes made during test sessions must be deleted as soon as possible. The video taping of any test session or material cannot be archived.

Reporting Decisions

In some instances, Building M-STEP Coordinators (as opposed to District M-STEP Coordinators) may be called on to make two important decisions **before** testing that will impact the reporting of results.

Research I and II Fields

The use of research fields is optional. Research codes are reported in the student data file results only. (Dynamic online reports do not include the research code information.)

In the past, school districts have used the optional research fields to answer such questions as:

- Is there a relationship between the number of years students have attended school in our district and their test scores?
- Is there a difference in attainment of achievement objectives among those students who had reading program A vs. reading program B (vs. reading program C, etc.)?

The following important points should be considered before deciding to use research fields:

- Codes for research fields may be developed at the district or school level and assigned a different number from one to ten.
- Districts may elect to use one or both of the research code options at any or all of the grades assessed.
- Research codes can be filled in on the Answer Document or entered into the Secure Site through the end of Tested Roster.

If research codes are used, District M-STEP Coordinators need to inform Building Coordinators and Test Administrators so they can be entered either on the students' Answer Documents or added in the Secure Site before the end of Tested Roster.

Reporting Codes

Reporting codes allow districts and/or schools to receive reports organized by class or group designation(s). This is an optional field. It is up to the district or school to determine whether this option will be used and to define the codes that will be most helpful. If these codes are used, Building M-STEP Coordinators must inform Test Administrators of the 4-digit code.

Reporting codes must either be entered on the students' Answer Documents or added in the Secure Site before the end of Tested Roster.

End-of-Test Window Activities

There are a number of tasks that must be completed at the end of each testing window. Although Building M-STEP Coordinators may not carry out the tasks themselves, they are responsible for working with others to make sure they are completed.

Returning Test Materials

Either the District or Building M-STEP Coordinator needs to return test materials to the M-STEP scoring contractor **at the end of each test window**. (See the table on page 54 for return deadlines.) Detailed directions for this task are included in the Return Materials Instructions section page 81 of this manual.

Clearing the TSM

Building M-STEP Coordinators should work with District M-STEP Coordinators to remind Technology Coordinators that the TSM needs to be cleared of any stored responses at the end of each online testing window. If Technology Coordinators choose to, they may clear the TSM on a daily basis. Usually the TSM would only need to be cleared at the end of the day after all testing has been completed, however if students are having problems logging into tests, the TSM may be cleared more frequently.

Important Dates

2017 Online Assessment Windows					
	Grades 5, 8 & 11 Grades 3, 4, 6 & 7				
	April 10-May 5 May 1-26				

2017 Paper/Pencil Assessment Administration Dates

Subject Area	Grades 5 & 8	Grade 11	Grades 3, 4, 6 & 7
ELA Day 1	April 11	NA	May 2
ELA Day 2	April 12	NA	May 3
ELA Day 3	April 13	NA	NA
ELA Make-up	Grades 5 & 8: April 14 & 17 Makeup, any content area: April 21, 24, 25, 26, 27, and 28	NA	Grades 3, 4, 6 & 7: May 4, 5, and 8 Makeup, any content area: May 12, 15, 16, 17, 18, and 19
Math Day 1, Day 2	Grades 5 & 8: April 18, 19 Makeup, any content area: April 21, 24, 25, 26, 27, and 28	NA	Grades 3, 4, 6 & 7: May 9, 10 Makeup, any content area: May 12, 15, 16, 17, 18, and 19
Social Studies	Grades 5 & 8: April 20 Makeup, any content area: April 21, 24, 25, 26, 27, and 28	Grade 11: April 13 Makeup: April 14–28 (excluding weekends)	NA
Science	NA	Grade 11: April 13 Makeup: April 15–29 (excluding weekends)	Grades 4 & 7: May 11 Makeup, any content area: May 12, 15, 16, 17, 18, and 19

	Important Pre-Testing A	ctivities
M-STEP Pre-ID	Opens: January 9, 2017 Closes for preprinted barcode labels (paper/pencil testers): February 14, 2017	
Window	Closes for online test session pull:	February 14, 2017
	Remains open for new students through the last day of the grade-specific test window	
M-STEP Initial Order Window	January 9–February 14, 2017	
M-STEP Additional Order Window	Grades 5, 8 and 11: April 4–April 25, 2017 Grades 3, 4, 6 and 7: April 25–May 16, 2017	
M-STEP Spring Coordinator Live and Taped WebEx	February 28, 2017 (live) The recorded version will be available in eDIRECT on March 4, 2017 (This Webex relates only to online testing)	
Spring 2017 M-STEP Test Recorded Presentations	Released in chapters on the M-STEP web page starting by early March.	
M-STEP Initial Test Materials Arrive in Districts	Grades 5, 8 and 11: Grades 3, 4, 6 and 7: April 24–26, 2017	

* For grades 5, 8 and 11, schools may request an alternate delivery date of April 3–5 via the Alternate Initial Materials Delivery Request survey. Alternate delivery dates for grades 3, 4, 6 and 7 are April 24–26.Schools must complete the Alternate Delivery Request survey which is open January 9–February 3, 2017.which is open January 9–February 3, 2017.

Two other surveys being conducted by the OSA include: (1) the Off-site Test Administration Request survey, which opened on October 24, 2016 for grade/schoolwide testing and remains open for individual students (e.g., homebound, expelled, etc.) through the end of each grade-specific testing window; and (2) the Alternate INSIGHT Availability Request survey for schools that provide regular classroom instruction after 4:00 PM, which was open January 19–February 9, 2017.

Materials Return Dates				
Grades	Final date to ship without penalty and inclusion in Answer Document Verification	Shipping dates with \$250 late fee charge	Shipping dates with \$250 late fee and \$25 processing fee per Answer Document	Dates after which materials will NOT be scored
Grades 5, 8 and 11	May 3, 2017	May 4-10, 2017	May 17, 2017	May 18, 2017
Grades 3, 4, 6 and 7	May 24, 2017	May 25-31, 2017	June 7, 2017	June 1, 2017

Building Coordinator Online Checklist

A single-page checklist is provided on the following page to guide Building Coordinators in carrying out the tasks associated with online M-STEP testing. The checklist can also be downloaded from <u>eDIRECT</u> (https://mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents.



Spring 2017 Online Assessments

Building Coordinator Checklist of REQUIRED ONLINE TASKS AND ACTIVITIES



2017 M-STEP Test Windows			
Grades 5, 8, and 11	April 10- May 5		
Grades 3, 4, 6 and 7	May 1—May 26		

eDIRECT: https://mi.drcedirect.com

Access reference documents in eDIRECT: Select All Applications \rightarrow General Information \rightarrow filter for M-STEP documents. (All documents should be posted by Wednesday, March 1, 2017. Check back for updates.)

Building Coordinator Checklist:

This checklist is intended to be used *in conjunction* with the **M-STEP Test Administration Manual**, which is found in eDIRECT. **All steps below are required for successful implementation**.

✓		Task
	1.	Watch the District/Building Coordinator Online Webex (Live 2/28/17) or a recording of the Webex (posted by 3/1/17) in eDIRECT under All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document type: Training Presentations & FAQs and at www.michigan.gov/mstep
	2.	Review the M-STEP Test Administration Manual (TAM) (access in eDIRECT documents or at www.michigan.gov/mstep)
	3.	Ensure all Test Administrators read the M-STEP Online Administration Directions (printed and in eDIRECT documents) and/or the M-STEP Paper/Pencil Administration Directions (printed and in eDIRECT documents). These can also be found on the <u>M-STEP web page</u> (www.michigan.gov/mstep).
	4.	Coordinate and verify Test Engine (INSIGHT) and Testing Site Manager (TSM) set up with the Technology Coordinator (test that the system is properly installed by accessing OTTs)
	5.	Coordinate the student use of Online Tools Trainings (OTTs) and the M-STEP Tutorial
	6.	Manage the Student Roster in eDIRECT. Update incorrect/missing information in the Secure Site. (If you don't have access to the Secure Site, see the District M-STEP Coordinator for assistance.)

1	Task
	 Schedule the Test Sessions and Create or Edit Test Sessions in eDIRECT, if necessary
	8. Assign appropriate accommodations to students who need them (must be done before generating login tickets)
	9. Print/sort/distribute student Test Login Tickets to Test Administrators (daily)
	10. Monitor testing and support Test Administrators during test window (daily)
	11. Provide Guided Access password to Test Administrators for students testing on iPad devices, if applicable.
	12. Post-Test Housekeeping—collect/destroy all login tickets, test rosters, reference documents, graph paper, and scratch paper; verify that student statuses show "completed" for each student (eDIRECT: Test Setup → Student Status); schedule makeup sessions for students as needed (daily); coordinate the return of all test materials

Questions Regarding eDIRECT, INSIGHT, or the above steps?

- Consult the M-STEP Test Administration Manual
- Call the DAS Call Center at 1-877-560-8378 (choose option 2)

Roles and Responsibilities

Test Administrators are responsible for helping to prepare for test administration and for administering the M-STEP tests directly to students. That includes carrying out the following tasks:

- Discuss and enforce cell phone and personal electronic device policy with all students
- Arrange the testing environment (making sure that each student has a testing device and that all posters, formulas, maps, etc. that could cue the students have been covered or removed)
- Distribute test tickets provided by the Building M-STEP Coordinator to students testing online
- Distribute paper/pencil test materials (if used)
- Read and follow all test directions
- Start Guided Access on iPad devices and enable volume rocker buttons (if using iOS version 9.3.1 or earlier; see the Securing the iPad for Testing with INSIGHT section on page 60 for more information)
- Collect test tickets immediately after login and deliver them to the Building M-STEP Coordinator after each test session
- Monitor students during testing
- Report incidents promptly to the Building M-STEP Coordinator
- Collect scratch paper and graph paper (if used) at the end of each test session and deliver to the Building M-STEP Coordinator
- Ensure that students using 1:1 testing devices (such as iPads or Chromebooks that go home with students) have completely exited from the testing system before leaving the testing room

- Stop Guided Access on iPad devices (if using iOS version 9.3.1 or earlier)
- Ensure that each Answer Document used for paper/pencil testing has a barcode label affixed to it and the correct information is printed on the front page (a \$10 fee may be assessed for each Answer Document returned for scoring without a label)

Test Administrator Resources

Test Administrators may be administering online tests, paper/pencil versions of the test, or both. Therefore, the Office of Assessment and Accountability (OSA) and its testing contractor have developed a number of resources and tools designed to help Test Administrators better navigate the administration process, including (1) the M-STEP Paper/Pencil Test Administration **Directions** (available in print form and online on the M-STEP web page (www.michigan. gov/mstep), and (2) the M-STEP Online Administration Directions (also available in printed form and online at the above address). Other resources and tools (presentations, mini-tutorials, and manuals) are described in detail in the Overview section on page 12 of this manual.

Managing Test Sessions

🗏 Test Tickets

Each student will require a test ticket for every test session, and each test ticket will have a unique username and password. Examples of test tickets for a two-part test are shown on the next page.



Building M-STEP Coordinators will provide test tickets to Test Administrators prior to starting each test. The test tickets (and corresponding test rosters) are secure materials. They should be kept in a secure location until they are needed. Students should have their test tickets to log into a test, but not for any other reason.

It is good practice to count the number of test tickets at the start of a test session and again at the end of a test session to ensure that no test tickets are left behind. All test tickets should be returned to the Building M-STEP Coordinator at the conclusion of each testing session.

Sample Test Tickets

M-STEP Spring 2017 Test Ticket

G 7 Science - Part 1

Test Session: Smith Student Name: Anderson, Abigail A Date of Birth: 11/11/2000 State Student ID (UIC): 1234567890 District Student ID: 9483722 Username: AAnderson1 Password: 234K79HQ Accommodation(s): MSK

M-STEP Spring 2017 Test Ticket

G 7 Science - Part 2

Test Session: Smith Student Name: Anderson, Abigail A Date of Birth: 11/11/2000 State Student ID (UIC): 1234567890 District Student ID: 9483722 Username: AAnderson1 Password: 234K79HQ Accommodation(s): MSK

Breaks During Testing

Breaks ARE allowed during M-STEP testing (online and paper/pencil). During online test sessions, breaks can be provided using the software's "Pause" feature (do **not** click "Review/End Test"—that will cause the student's responses to be submitted). Tests can be paused for up to 20 minutes. If the 20-minute limit expires, the student will need his/her test ticket to log back in.

Paper/pencil testers are allowed to take breaks anytime a stop sign appears in their test booklets. (These signs appear at the end of each test part, which will be noted in the test directions.) If one or more students leave the room, the Test Administrator must collect their Answer Documents, and if used, scratch paper, put them inside the students' test booklets, and give them back to the students when they return. Students may not return to an earlier part of their test booklet after a break is taken.

Verifying Supports and Accommodations on Test Tickets

Students with supports and accommodations will have some of those supports and accommodations displayed at the bottom of their test ticket (see the bold text at the bottom of the sample test ticket below).

M-STEP Spring 2017 Test Ticket

G 7 Science - Part 1

Test Session: Smith Student Name: Anderson, Abigail A Date of Birth: 11/11/2000 State Student ID (UIC): 1234567890 District Student ID: 9483722 Username: AAnderson1 Password: 234K79HQ Accommodation(s): MSK Embedded online supports and accommodations are abbreviated on the test tickets as follows:

Embedded Online Supports/ Accommodations	Test Ticket Abbreviation
Closed Captioning	CCAPTION
Color Choices	СС
Contrasting Color	СТС
Masking	MSK
Reverse Contrast	RC
Stacked Translation (Spanish mathematics only)	ST
Text-to-Speech (items only)	TTS
Text-to-Speech (items and passages)	TTSPASSAGE
Video Sign Language	VSL

Non-embedded supports and accommodations do not display on test tickets.

Some accommodations will require Test Administrators to turn them on once the student has launched INSIGHT. Refer to the M-STEP Online Administration Directions for more information on turning on accommodations. This document is available in <u>eDIRECT</u> (https://mi.drcedirect.com) and on the <u>M-STEP web page</u> (www.michigan.gov/ mstep).

Moving Online Testers to a Different Testing Device or Room

There are two main reasons why it would be necessary to move an online tester from one computer to another during testing:

1. There are technology issues with the computer software or hardware that make it difficult and/or impossible for the student to continue testing on that computer.

2. The student requires additional time to complete the test and another location would be more suitable.

If a student needs to move from one computer to another after testing has begun, follow these steps:

- Click on the "Pause" button and then click the "Exit" button (**Do not** click "End Test").
- Collect the student's test ticket, and if used, scratch paper, to bring to the new testing computer.
- 3. Escort the student to the new location (or computer).
- 4. Launch the testing software.
- 5. Hand the test ticket back to the student.
- 6. Observe the student entering his/her username and password.
- 7. The student will be required to view and click through the test directions.
- The student will click "Start Test" and will be taken to the same question where he/ she left off prior to pausing.
- 9. Collect the student's test ticket.
- 10. Continue to monitor the test session with the normal security procedures.

The testing software expects a student to start and finish a test session (not necessarily all testing, but that test ticket) on the same TSM. If your school uses more than one TSM, the test session will likely be locked if the student moves to a computer on a different TSM. Please work with the Technology Coordinator to identify any testing device-to-TSM relationships or contact DRC to have the test unlocked



Moving Paper/Pencil Testers to a Different Room

Sometimes paper/pencil testers have to be moved to a different location during testing. This usually happens when one student takes longer than other students to complete the test. If this happens, put the student's Answer Document, and if used, scratch paper, inside his/her test booklet and move the student to a quiet location absent any cluing materials (maps, equations, posters, etc.). The student must be accompanied by a Test Administrator or proctor until he/she finishes testing.

Test Directions

Detailed test directions are included in the M-STEP Online Administration Directions and the M-STEP Paper/Pencil Administration Directions. Please refer to those documents, which are available in <u>eDIRECT</u> (https://mi.drcedirect.com) in printed and electronic form, when preparing for and administering the M-STEP tests.

Let Issues Specific to Online Testers

While reading test directions to online testers, it is very common for them to click ahead. Some students may reach the "Begin Test" button before you direct students to begin. In some cases, the student may even start taking the test. When the student realizes he or she has gone too far, there is a tendency to click "End Test" to get out of the test. If this happens, the test will become locked and it cannot be unlocked. This will result in the submission of a test with no responses. Therefore, before you begin reading the test directions, it may be helpful to remind students not to click ahead. If they do click the "Begin Test" button early, they should select the "Pause" button and wait for your directions.

□ Securing the iPad for Testing with INSIGHT

New for this year, any iPad running iOS 9.3.2 or later will automatically enter kiosk mode when INSIGHT launches, using Automatic Assessment Configuration. You can check a device's iOS version under Settings \rightarrow General \rightarrow About. Please ask your Technology Coordinator if you are unsure what iOS version you are using.

iPads using older versions of iOS will need to secure the device with Guided Access or Autonomous Single App Mode (ASAM). Please consult with your Technology Coordinator about which security method you are using.

If using Guided Access mode: once the INSIGHT app is launched, click the home button (the round one on the screen) three times. A message box will appear asking for a numeric passcode. Your Technology Coordinator must provide this to you. While students can click the home button to enter Guided Access, Test Administrators must enter the passcode and not give the passcode to students before or after testing. The same passcode will be needed to exit Guided Access mode.

ASAM may place INSIGHT into Guided Access automatically upon launching. No passcode is needed, and this will be functionally identical to Automatic Assessment Configuration. This is simpler but is not available for all mobile device management systems.

As needed, please remember to adjust volume, plug in headphones, and plug in external keyboards before launching INSIGHT and entering kiosk mode. Otherwise, you may need to exited Guided Access or INSIGHT entirely to plug in or adjust peripherals.

Ending a Test Session

🗏 Online Testers

When students have completed their test, they should click "End Test" (or "Exit" if taking a CAT) and continue clicking through until they are given the opportunity to close INSIGHT. At that point, the Test Administrator should see the desktop or home screen of the device.

If students are testing on devices they carry with them (commonly called 1:1 devices), Test Administrators need to check the devices to make sure the desktop or home screen is showing before students leave the testing room. This is the only way to be sure that students are not still logged into the testing software. (See the M-STEP Online Administration Directions for more detailed information on ending online tests.)

🗏 Internet Connectivity

Online testing requires a reliable connection to the Internet. If a student's computer loses contact with the TSM or DRC during computer adaptive testing or if response caching is not enabled, testing will be paused while INSIGHT attempts to reconnect. If INSIGHT cannot reconnect, the student will be logged out of the test. The student can log back in once the connection is restored, usually immediately. If student responses were being cached, responses may need to be pushed from the TSM to DRC, either manually or by an automatic process. The connection is checked every 45 seconds or whenever an answer is selected. At most the one answer is lost to a lost connection (or up to 45 seconds of an essay). Testing resumes at the point where the connection was lost. Where available, wired connections usually have fewer disconnect "blips" than wireless connections.

Paper/Pencil Testers

All parts of the M-STEP test are untimed and student-paced. Therefore, students must be given as much time as needed during the same continuous session on the test date to complete each part of the test. If a test session time slot has ended but there are a few students who need more time to finish, their test materials may be collected and they may be escorted immediately to a different supervised location where they may complete their test.

For all other students who have finished testing, collect their test materials individually (do **not** have them pass their materials to the ends of rows or aisles). Verify that each student has returned both his/her Answer Document and test booklet; then, return the secure materials to the Building M-STEP Coordinator. (See the M-STEP Paper/Pencil Administration Directions for more detailed information on ending paper/pencil tests.)



Important Dates

2017 Online Assessment Windows		
	Grades 5, 8 & 11	Grades 3, 4, 6 & 7
	April 10-May 5	May 1-26

2017 Paper/Pencil Assessment Administration Dates			
Subject Area	Grades 5 & 8	Grade 11	Grades 3, 4, 6 & 7
ELA Day 1	April 11	NA	May 2
ELA Day 2	April 12	NA	May 3
ELA Day 3	April 13	NA	NA
ELA Make-up	Grades 5 & 8: April 14 & 17 Makeup, any content area: April 21, 24, 25, 26, 27, and 28	NA	Grades 3, 4, 6 & 7: May 4, 5, and 8 Makeup, any content area: May 12, 15, 16, 17, 18, and 19
Math Day 1, Day 2	Grades 5 & 8: April 18, 19 Makeup, any content area: April 21, 24, 25, 26, 27, and 28	NA	Grades 3, 4, 6 & 7: May 9, 10 Makeup, any content area: May 12, 15, 16, 17, 18, and 19
Social Studies	Grades 5 & 8: April 20 Makeup, any content area: April 21, 24, 25, 26, 27, and 28	Grade 11: April 13 Makeup: April 14–28 (excluding weekends)	NA
Science	NA	Grade 11: April 13 Makeup: April 15–29 (excluding weekends)	Grades 4 & 7: May 11 Makeup, any content area: May 12, 15, 16, 17, 18, and 19

	Important Pre-Testing A	ctivities
M-STEP Pre-ID	Opens: January 9, 2017 Closes for preprinted barcode labels (paper/pencil testers): February 14, 2017	
Window	Closes for online test session pull: February 14, 2017	
	Remains open for new students th grade-specific test window	rough the last day of the
M-STEP Initial Order Window	January 9–February 14, 2017	
M-STEP Additional Order Window	Grades 5, 8 and 11: April 4–April 25, 2017 Grades 3, 4, 6 and 7: April 25–May 16, 2017	
M-STEP Spring Coordinator Live and Taped WebEx	February 28, 2017 (live) The recorded version will be available in eDIRECT on March 4, 2017 (This Webex relates only to online testing)	
Spring 2017 M-STEP Test Recorded Presentations	Released in chapters on the M-STEP web page starting by early March.	
M-STEP Initial Test Materials Arrive in Districts	Grades 5, 8 and 11: March 27-29, 2017*	Grades 3, 4, 6 and 7: April 24–26, 2017
* For grades 5, 8 and 11, schools may request an alternate delivery date of April 3–5 via the Alternate Initial Materials Delivery Request survey. Alternate delivery dates for grades 3, 4, 6		

open January 9–February 3, 2017.which is open January 9–February 3, 2017. Two other surveys being conducted by the OSA include: (1) the Off-site Test Administration Request survey, which opened on October 24, 2016 for grade/schoolwide testing and remains open for individual students (e.g., homebound, expelled, etc.) through the end of each grade-specific testing window; and (2) the Alternate INSIGHT Availability Request survey for schools that provide regular classroom instruction after 4:00 PM, which was open January 19–

February 9, 2017.



Materials Return Dates				
Grades Final date to ship without penalty and inclusion with \$250 late in Answer Document Verification		Shipping dates with \$250 late fee and \$25 processing fee per Answer Document	Dates after which materials will NOT be scored	
Grades 5, 8 and 11	May 3, 2017	May 4-10, 2017	May 17, 2017	May 18, 2017
Grades 3, 4, 6 and 7	May 24, 2017	May 25–31, 2017	June 7, 2017	June 1, 2017

□ Test Administrator Online Checklist

The single-page checklist on the following page of this manual is designed to help Test Administrators with the tasks associated with online M-STEP testing. The checklist may also be downloaded from <u>eDIRECT</u> (https://mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents.

In addition, the tables on "Important Dates" on page 62 will help Test Administrators keep track of the dates by which important test-related activities must be completed.



Spring 2017 Online Assessments Test Administrator Checklist of REQUIRED ONLINE TASKS AND ACTIVITIES



REQUIRED ONLINE TASKS AND ACTIVITIES		
2017 M-STEP Test Windows		
Grades 5, 8, and 11	April 10– May 5	

May 1-May 26

eDIRECT: https://mi.drcedirect.com

Access Reference Documents in eDIRECT: Select All Applications \rightarrow General Information \rightarrow Documents \rightarrow filter for "All" administration documents. (All documents should be posted by Friday, March 1, 2017. Check back for updates.)

Test Administrator Checklist:

This checklist is intended to be used *in conjunction* with the **M-STEP Test Administrator Manual** and the **M-STEP Online Administration Directions**, both of which can be found in eDIRECT.

All steps below are required for successful implementation.

Grades 3, 4, 6 and 7

✓	Task
	Before Testing
	1. Ensure INSIGHT software is installed on all testing devices and that you know how to launch it on those devices
	2. Ensure students have practiced using the OTT/Sample Item Sets
	3. Ensure you and your students have viewed the M-STEP tutorial available on eDIRECT and/or the INSIGHT engine
	4. Review all applicable sections of the M-STEP Test Administration Manual (TAM)
	5. Read the entire M-STEP Online Administration Directions (there are separate directions for paper/pencil)
	6. Clearly understand the scheduled testing time, including breaks
	 Prepare the classroom for testing (see the M-STEP Online Administration Directions for more information)
	8. Obtain a student test ticket for each student who will be testing



✓	Task
	9. Count the test tickets you will be using for this test session
	During Testing
	 Distribute test materials (headphones, if applicable, scratch paper, graph paper, test tickets)
	 Read Test Directions aloud to students (use the M-STEP Online Administration Directions)
	3. If testing on an iPad, make sure the volume rocker buttons are enabled
	 If testing on an iPad using iOS 9.3.1 or earlier, start Guided Access (refer to Securing the iPad for Testing with INSIGHT section on page 60)
	5. Collect test tickets after students have signed in. Retain tickets for students who need to log in again.
	6. Monitor students during testing
	After Testing
	1. Collect/Return to Building M-STEP Coordinator all test tickets, test rosters, scratch paper, and graph paper to be securely stored or destroyed
	2. For students testing on an iPad using iOS 9.3.1 or earlier, use the passcode provided by your Building M-STEP Coordinator/Technology Coordinator to stop Guided Access
	 For students testing on 1:1 devices (devices that leave the testing room), be sure you can see the desktop/home screen of the device before the student leaves (this ensures they are not still logged into the test)

Questions Regarding the above steps?

• Consult with the Building M-STEP Coordinator

Supports and Accommodations

What Are Supports and Accommodations?

Generally speaking, supports and accommodations are tools, resources, and strategies that allow all students equitable access to the content measured on the state's standardized assessments.

There are three broad categories into which these tools, resources, and strategies fall: (1) universal tools, which are available to **all** students, (2) designated supports, which are indicated as needed by an adult or team, and (3) accommodations, which are specifically documented in a student's Individualized Education Plan (IEP) or Section 504 Plan.

This section of the manual provides detailed information specifically related to the latter two categories—designated supports and accommodations. It should be noted that what is considered a support for one content area and/or one grade, may be considered an accommodation for another content area or grade, so it is imperative to approach the provision of supports and accommodations from a student-centered perspective (i.e., do not assume that what applies to one student in one grade taking a particular content-area test will apply across the board to all students).

For more detailed information on supports and accommodations (as well as universal tools), refer to the *Michigan Supports and Accommodations Manual* and the *Supports and Accommodations Table*, which are available on the <u>M-STEP web page</u> (www.michigan.gov/mstep).

Ordering Accommodated Materials

Some supports and accommodations for students require that they take paper/pencil versions of the tests. **These tests must be specifically requested when ordering materials in the** <u>Secure Site</u> (https://baa. state.mi.us/BAAsecure). Conversely, other supports and

accommodations may require that a student take the test online. **Some supports and/ or accommodations that an individual student needs to test online must be identified and enabled in eDIRECT**. These include embedded supports and accommodations and those on which the Office of Assessment and Accountability (OSA) is collecting additional information.

If a student requires a Reader Script, an audio CD, or a video DVD, a special accommodations kit must be ordered for that student. **These kits only contain one paper/pencil test booklet**. Therefore, when more than one student will use the same Reader Script, CD, or DVD (i.e., students will be testing in small groups), additional paper/pencil test booklets must be ordered (the order screen will request the number of students expected to test with each kit, so be sure to enter the correct number.)

Supports and Accommodations Tracking Sheet

The OSA has developed an **optional** Supports and Accommodations Tracking Sheet to help District and Building M-STEP Coordinators ensure that the correct designated supports and accommodations are ordered and available for individual students at the time of testing. The sheet is intended only for organizational purposes; it should not replace or usurp teamlevel decisions or documented needs in a student's IEP or Section 504 Plan. The sheet is available on the <u>M-STEP web page</u> (www. michigan.gov/mstep).



Embedded and Non-embedded Supports and Accommodations

The Spring 2017 M-STEP **online** assessments offer two kinds of supports and accommodations—embedded and non-embedded. Embedded supports and accommodations are those that are integrated into the online testing system. They are referred to as "online" accommodations in eDIRECT. These accommodations need to be turned on, or enabled, by the Building M-STEP Coordinator in eDIRECT **before** a student's test ticket is generated.

Non-embedded accommodations are those that are not available within the test engine, such as noise buffers or having a teacher read the items aloud to a student. These are referred to as "standard" accommodations in eDIRECT. They can be checked before or after a student tests. (This eDIRECT designation should **not** be confused with the state's designation regarding which supports and accommodations are considered standard and nonstandard for accountability purposes.)

A Supports and Accommodations Companion Document can be found on page 79 of this manual. By using the numbers in that document, schools can identify which supports listed in eDIRECT (or on the paper/pencil Answer Document) match those within the Supports and Accommodations Table located on the <u>M-STEP web page</u> (www.michigan.gov/mstep).

Turning On Supports and Accommodations

For detailed information related to turning on embedded accommodations, refer to the mini-module called *Accommodations—Adding*, *Editing*, *Mass-assigning Guide*, which can be found in <u>eDIRECT</u> (https://mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document Type: Mini-Modules.

Verifying Test Tickets

Test Administrators can verify a student's embedded online supports and accommodations by reviewing his/her test ticket(s).

M-STEP Spring 2017 Test Ticket

G 7 Science - Part 1

Test Session: Smith Student Name: Anderson, Abigail A Date of Birth: 11/11/2000 State Student ID (UIC): 1234567890 District Student ID: 9483722 Username: AAnderson1 Password: 234K79HQ Accommodation(s): MSK

The table shows how embedded online supports and accommodations are abbreviated on the test tickets.

Embedded Online Supports/ Accommodations	Test Ticket Abbreviation
Closed Captioning	CCAPTION
Color Choices	СС
Contrasting Color	СТС
Masking	MSK
Reverse Contrast	RC
Stacked Translation (Spanish mathematics only)	ST
Text-to-Speech (items only)	TTS
Text-to-Speech (items and passages)	TTSPASSAGE
Video Sign Language	VSL

Non-embedded supports and accommodations do not display on test tickets.

Where to Find More Information on Supports and Accommodations

Essential supports and accommodations information can be found on the <u>M-STEP web</u> page (www.michigan.gov/mstep), including:

- the Michigan Supports and Accommodations Manual
- the Supports and Accommodations Table
- Recommended Qualifications and Guidelines for Use of Translators and Language Interpreters for the M-STEP and MI-Access Assessments
- M-STEP and MI-Access Word-to-Word Bilingual Dictionary Guidance
- the M-STEP, MI-Access, and WIDA Scribing Protocol
- M-STEP Math Spanish Read-Aloud Guidelines
- the M-STEP Math and English Language Arts (ELA) Read-Aloud Guidelines

Webinars on supports and accommodations were held in the fall of 2016. Recorded versions of the webinars and accompanying materials are available on the <u>M-STEP web</u> page (www.michigan.gov/mstep). Scroll down to Student Supports and Accommodations.

Nonstandard Accommodations

Any student who receives a nonstandard accommodation will **not** count as being assessed. The Building M-STEP Coordinator should mark either the student's paper/ pencil Answer Document as "Nonstandard," or, if the student is testing online, enter that code in eDIRECT. For their own protection, Coordinators may also choose to file an Incident Report. Please contact the DAS Call Center (at 1-877-560-8378) for assistance, if needed. Following are two examples of why some accommodations are considered nonstandard.

- The M-STEP grade 3–5 ELA tests are intended to measure how well a student can read through decoding. Therefore, if the reading passages are read aloud to a student, it becomes a listening test and not a reading test. In this way, the construct of the test (or what it is designed to measure) is changed.
- Using a calculator on any portion of the M-STEP mathematics tests where calculators are not permitted is considered a nonstandard accommodation because the items are intended to measure a student's ability to make the calculations himself/ herself (for example, adding or subtracting two numbers). If a calculator is used on these items, it changes the construct of what is being measure.

Filling Out Supports and Accommodations Information on Answer Documents

When Test Administrators are working with paper/pencil testers to complete the demographic portion of their Answer Documents, they will need to make sure that information related to supports and accommodations is correctly recorded. The supports and accommodations information varies by Braille content area.

ELA Standard Supports and Accommodations

- Directions Read in Native Language
- Braille (Form 88)
- Enlarged Print
- Multiple-Day Testing
- Alternate Response
- American Sign Language (ASL)



- Noise Buffers
- Read Aloud
- Scribe
- Speech-to-Text
- Other

Mathematics Standard Supports and Accommodations

- Directions Read in Native Language
- Oral Translation in Native Language
- Braille (Form 88)
- Spanish Booklet
- Enlarged Print
- Multiple-Day Testing
- Alternate Response
- American Sign Language (ASL)
- Noise Buffers
- Read Aloud
- Scribe
- Speech-to-Text
- Abacus
- L1 Glossary
- Other

Science and Social Studies Standard Supports and Accommodations

- English DVD
- Spanish DVD
- Arabic DVD
- Reader Script
- Oral Translation in Native Language
- Braille (Form 88)

- Enlarged Print (paper/pencil only)
- Audio CD
- Multiple-Day Testing
- Other

Using Audio CD Versions of the Tests

(Use Form 1 Test Booklet Only)

- Audio CDs are ONLY available for the M-STEP science and social studies assessments.
- The audio CD versions of the M-STEP tests are created from a Form 1 test booklet.
- Students using an audio CD must have a printed copy of a Form 1 test booklet to use during testing. Be sure to grid "Form 1" on the students' Answer Documents as noted in the test directions.
- This version of the test (designated support) will be shipped with one Form 1 test booklet. Be sure to order additional accommodated forms (Form 1) if using an audio CD with multiple students by accurately indicating the number of students to be tested with the CD on the materials order page in the <u>Secure Site</u> (https://baa.state.mi.us/BAASecure)
- The District/Building M-STEP Coordinator may order additional audio CDs.

The following instructions should be used when administering audio CD versions of the tests:

- Audio CDs are intended to be used by one student or by small groups of no more than five students.
- Individual students may use their audio CD in a small group setting only when the computer or CD player has headphones and the student has personal control over the equipment.



- Students should be able to use the equipment independently since this designated support should be used routinely in the classroom. Students may be assisted in playing the audio CD but may not be given any help with answering test items. Students who use audio CDs (based on individual need) must use a standard Spring 2017 Answer Document. Student responses can be recorded in a number of different ways. Students may
 - grid their own Answer Documents
 - mark their answers in their test booklets and have a Test Administrator, proctor, or test accommodations provider transcribe them onto their Answer Documents
 - dictate responses to a scribe or into a tape recorder and have a Test Administrator, proctor, or test accommodations provider grid the Answer Documents
 - Braille their responses and have a Test Administrator, proctor, or test accommodations provider transcribe the answers onto the Answer Documents
- For students using an audio CD as a designated support, it is important to grid the "Audio CD" circle on the students' Answer Document(s).
- Make sure a barcode label is placed on the front of each student's Answer Document where indicated.

✓ Using Video DVD Versions of the Tests

(Use Form 1 Test Booklet Only)

Video DVDs are available only for the M-STEP science and social studies tests, and provide an enhancement to the audio CD versions. Students are able to use the video display as an additional cue when determining where they should be in a test booklet while they are taking a test.

- DVDs are designed to be used with a television and a DVD player. This equipment will produce the highest quality results.
- Each DVD version of the test will be shipped with one Form 1 test booklet.
- Students using a DVD must have a printed copy of a Form 1 test booklet to use during testing. Be sure to indicate "Form 1" on each student's Answer Document as noted in the test directions.
- This version of the test will be shipped with one Form 1 test booklet. Be sure to order additional accommodated forms (Form 1) if using a DVD with multiple students by accurately indicating the number of students to be tested with the DVD on the materials order page in the <u>Secure Site</u> (https://baa.state.mi.us/BAASecure).
- The District/Building M-STEP Coordinator may order additional video DVDs.
- Video DVDs for science and social studies are available in Spanish, Arabic, and English. (They are **not** available at all for ELA and mathematics.)

The following instructions should be used when administering video DVD versions of the tests:

- Tests are to be administered to students either individually or in small groups (up to five students) in a setting where the video will not disturb other students.
- The Test Administrator will need to make sure the appropriate video language circle is filled in on each student's Answer Document.
- Students who use videos (based on individual need) must use a standard Spring 2017 Answer Document. Responses can be recorded in a number of ways. Students may
 - grid their own Answer Documents



- mark answers in their test booklets and have a Test Administrator, proctor, or test accommodations provider transcribe the answers onto the Answer Documents
- dictate responses to a scribe or into a tape recorder and have a Test Administrator, proctor, or test accommodations provider grid the Answer Documents
- Each test question is marked on the DVD. This helps students return to the appropriate place, if needed, during test administration.
- For students using DVDs as a designated support, mark the appropriate DVD bubble on their Answer Document.
- Make sure a barcode label is placed on the front of each student's Answer Document where indicated.

Reading Directions and Track/Chapter Numbers— Audio CDs and Video DVDs

Audio CDs and video DVDs are formatted so that the track number in Part 1 of each test corresponds to the test questions for each test part. Test Administrators and accommodations providers should be aware of the following:

- Directions on the CDs and DVDs are attached to a test question. For example, the initial directions for Science, Part 1 will be part of Track or Chapter 1. This means that a student who returns to test question 1 will hear the directions again. This is a drawback, but it is the only way that tracks/chapters can be aligned with the actual test question numbers.
- Test Administrators or accommodation providers must read aloud the directions exactly as written to the student(s) so that students may ask questions before beginning the test. Students will hear the

directions a second time on the CD or DVD because the directions are attached to test question tracks.

• Tracks/chapters for Part 2 (if applicable) of the DVDs may begin with Track or Chapter 1 again. This may not correspond to the test question numbers. Students may need to search for the test question numbers by paging back and forth rather than using the menu function offered in the software.

Using Reader Scripts

(Use Form 1 Test Booklet Only)

The use of Reader Scripts (scripted versions of the M-STEP test) standardizes the way in which tests are read aloud to students. Reader Scripts are ONLY offered for M-STEP science and social studies and they are considered a designated support. (See the "Read-Aloud Guidelines" on page 76 for information on readers for ELA and mathematics.)

Reader Scripts may be administered one-onone or in small groups of up to five students. Students will use a **Form 1 test booklet** while the test administrator reads aloud from the Reader Script. The ordering process for Reader Scripts is similar to the process used for ordering video DVDs.

For students using a Reader Script as an accommodation, it is important to **fill in the** "**Reader Script**" **circle on their Answer Document**. Also make sure a barcode label is placed on the front of each student's Answer Document where indicated.
Using Oral Translations for Native Language

(Use Form 1 Test Booklet Only)

For science and social studies, translations for native languages must use the Reader Script.

✓ Using Enlarged Print Versions of the Test

(Use Form 1 Test Booklet Only)

- Use of the enlarged print version of the assessment is a standard accommodation (1) for students with disabilities who need that accommodation as defined in their IEP, or (2) for general education students with Section 504 Plans.
- Form 1 is used as the basis for the enlarged print version of the test.
- Students who use an enlarged print version of the test must record their answers in their test booklet and have them transferred by a Test Administrator, proctor, or accommodations provider onto a regular Answer Document.
 Spelling, punctuation, indentation, etc., must be transcribed exactly as it appears in the student's original response.
- Once student responses have been transcribed onto a regular Answer Document, the student's test booklet can be returned in a secure, non-scorable box.
- If students use an enlarged print version of the test, it is important to fill in the "Enlarged Print" circle on their Answer Document.
- Make sure a barcode label is placed on the front of the transcribed Answer Document where indicated.

Versions of the Test

Using Braille versions of the assessment is a standard accommodation (1) for students with disabilities who need this accommodation as defined in their IEP, or (2) for general education students with Section 504 Plans.

- The use of a Braillewriter is permissible. If a student uses a Braillewriter as an assessment accommodation, a Test Administrator, proctor, or accommodations provider must transcribe the student's responses onto a regular Answer Document that is returned along with other secure, scorable materials. Spelling, punctuation, indentation, etc., must be transcribed exactly as it appears in the student's original response.
- Each Braille version of a subject-area M-STEP test will be a unique test form **(Form 88)**.
- Each grade-level/subject-area Braille accommodated kit will include a companion Assessment Administrator Booklet for Braille. This booklet is provided so that Test Administrators/accommodations providers can see how the original test items were modified for the student. It also allows them to follow along with the student, even if they do not read Braille.
- A *Print to Braille Correspondence* document is available on the <u>M-STEP web page</u> (www. michigan.gov/mstep).
- If students use a Braille version of the test or a Braillewriter, it is important to **bubble** Form 88 on their Answer Document.
- The Answer Document to be used for Braille is included in the Braille kit.
- Make sure a barcode label is affixed to the front of the student's transcribed Answer Document where indicated.



Directions for Other Common Supports and Accommodations

Scribes and Tape Recorders

(Use the test booklet form assigned to the school.)

Dictating responses to a scribe or into a tape recorder is a standard support or accommodation for students who need that support or accommodation as defined in their IEP or Section 504 Plan, or for students who have rapid onset of a medical disability.

- Scribes should review the *Scribing Protocol* found on the <u>M-STEP web page</u> (www. michigan.gov/mstep) to make sure they are doing their job correctly.
- If a student uses a tape recorder or scribe as a designated support or assessment accommodation, a Test Administrator, proctor, or accommodations provider must **transcribe the student's response onto a regular Answer Document** that is returned along with other scorable materials.
- For students using a tape recorder as a designated support or accommodation, it is important to grid the "Other" circle on each student's Answer Documents and indicate the administered accommodation.
- For students using a scribe as a designated support or accommodation, grid the "Scribe" circle on each student's Answer Documents and indicate the administered support.
- Make sure a barcode label is affixed to the front of the Answer Document where indicated.

Word Processors

(Use the test booklet form assigned to the school.)

The use of word processors for constructedresponse items is a standard accommodation for students who need that support or accommodation as defined in their IEP or Section 504 Plan, or for students who have rapid onset of a medical disability.

Because the ELA tests assess the student's use of the conventions of writing, including correct spelling and grammatical usage, students using word processors or word processing software as an accommodation must be monitored to ensure that **spelling**, **dictionary**, **thesaurus**, **and grammatical software are not activated**. **Auto-correct may not be used**, **either**.

- Fill in the "Other" circle on the student's Answer Document and indicate that the student used a word processor as an accommodation.
- If the spell check, dictionary, thesaurus, and grammatical software were not deactivated, the "Nonstandard Accommodations" circle must be gridded.
- If a student uses a word processor or another accommodation to record multiple-choice answers, these must be transferred onto a regular Answer Document by the student, Test Administrator, proctor, or accommodations provider. (See the *Michigan Supports and* Accommodations Manual and the Supports and Accommodations Table on the M-STEP web page). Word-processed constructedresponse answers do not need to be transcribed onto an Answer Document by school staff.
- Each word-processed page must be printed and identified with the following student information:

- Student barcode label from the Secure Site
- Subject area and item number
- Current test year (for example, Spring 2017)
 - OR
- Student name, UIC, and birth date
- School code and district code
- Current test year, grade, subject area, and item number
- Word-processed page(s) must be inserted into the student's Answer
 Document that has all required student identification information completed.
 Do not staple or otherwise attach wordprocessed pages to the Answer Document.
- Word-processed pages returned without a completed student Answer Document cannot be scored.
- Make sure a barcode label is placed on the front of the Answer Document where indicated.
- All Answer Documents containing wordprocessed pages must be shipped in the orange Special Handling Envelope.

Additional or Adapted Paper as an Accommodation

(Use the test booklet form assigned to the school.)

- The use of additional paper is permitted for students who need that accommodation due to large handwriting. The need must be documented in the student's IEP or Section 504 Plan.
- When additional paper is used, the student should only be allowed to write the equivalent of what could be written (with average-sized handwriting) in the original space provided in the test booklet.

• Each additional piece of paper must be identified with the following information:

- Student barcode label from the Secure Site
- Subject area and item number
- Current test year (for example, Spring 2017)
- **OR**
- Student name, UIC, and birth date
- School code and district code
- Current test year, grade, subject area, and item number
- It is important to grid the "Other" circle on the student's Answer Document and indicate the administered accommodation.
- The additional paper must be inserted into the student's Answer Document that has all required student identification information completed. Do not staple or otherwise attach additional paper to the Answer Document.
- Additional paper that is returned without a completed student Answer Document cannot be scored.
- All Answer Documents containing additional paper must be shipped in the **orange Special Handling Envelope**.

Extended Time/Multiple Day

- All M-STEP tests are untimed and studentpaced.
- If an online tester requires more than one day to complete any single section of an online test, his/her test may be paused and exited at any point. The student will be able to log back into his/her test at any subsequent point within the testing window to complete the session. It is important that the student's test be paused and exited and not submitted.



- Students taking a paper/pencil test, with a multiple day, designated support will use the form of the test assigned to their school.
- As with any support, educators must provide ONLY those supports the student needs. Significant research indicates that providing students with unnecessary or unneeded tools or supports may negatively impact their test scores.
- Students who qualify for testing beyond the initial test dates will have until the last day of the grade-specific testing window to finish testing.
- Students may not begin a subject-area test before the first date the subject-area test is scheduled for all students.
- If extended time is used for a paper/pencil test, it is important to grid the "Multiple-Day Testing" circle on the student Answer Document(s).

Closed Captioning for ELA Listening

Closed captioning is only available for the listening items on the ELA online assessments. It will not be available for any other ELA items or for the mathematics, science, or social studies tests.

Read-Aloud Guidelines for ELA and Mathematics

The use of human readers is allowed across all grades as a **designated support** for M-STEP mathematics and non-passage parts of the ELA assessments. Human readers are also allowable for ELA reading passages as a **documented accommodation** in grades 6–8 (but not for grades 3–5). This accommodation is appropriate for only a very small number of students. For information on documentation requirements and decision-making criteria related to using human readers, go to the <u>M-STEP web page</u> (www.michigan.gov/mstep). The M-STEP online ELA and mathematics assessments have a text-to-speech designated support option. Students who do not have access to this support or who take a paper/ pencil test may utilize the Read-Aloud designated support. Designated supports are options available to all students who may need additional support to access the test content.

The Read-Aloud support is administered with a human reader who provides an oral presentation of the assessment text to an eligible student. The student depends on the reader to read the test questions accurately, pronounce words correctly, and speak in a clear voice throughout the test. The reader must be trained and qualified and must follow the *M-STEP Read-Aloud Guidelines* available on the <u>M-STEP web page</u> (www.michigan.gov/mstep).

Scribing Protocol

The 2017 Scribing Protocol for the M-STEP, MI-Access, and WIDA Assessments can be found on the M-STEP web page (www.michigan. gov/mstep). The protocol outlines the required procedures a scribe must follow. A scribe is an adult who writes down exactly what a student dictates via speech, American Sign Language, or an assistive communication device. The guiding principle in scribing is to ensure that the student has access and can respond to test content. Scribes are allowed as a documented accommodation for ELA writing, and as a designated support for science, social studies, mathematics, and ELA non-writing items.

Scribes may also be necessary for testing students with "sudden or rapid onset" conditions, like broken arms or wrists. Save any documentation, like doctor's notes, when using a scribe for "sudden or rapid onset" conditions.

Word-to-Word Bilingual Dictionaries

A recommended list of non-electronic wordto-word bilingual dictionaries and glossaries that can be used during M-STEP testing can be found on the <u>M-STEP web page</u> (www. michigan.gov/mstep). Scroll down to M-STEP and MI-Access Word-to-Word Bilingual Dictionary Guidance.

Returning Accommodated Materials and Answer Documents

- Audio CDs, video DVDs, enlarged print, and Braille versions of the test, as well as Reader Scripts, are **secure** materials that **must be returned** at the end of each test window. No copies of these materials may be made, downloaded, or retained. Make sure that all secure materials are included in return shipments.
- If a paper/pencil tester has word processed or additional pages, those pages must be inserted in the student's Answer Document and returned in the orange Special Handling Envelope in order to be scored. All other answer documents may be returned together in the secure, scorable materials boxes. (See the Materials Return Instructions section on page 81 of this manual for more detailed information.)

Other Reminders for Test Administrators and Accommodations Providers

- The *Supports and Accommodations Table* can serve as a guide for providing supports and accommodations.
- All M-STEP test supports and accommodations must be clearly defined by subject area in the testing section of each student's IEP, Section 504 Plan, or EL instructional record. A state model IEP can be found on the <u>MDE website</u> (www. michigan.gov/mde). Search for "Model IEP."
- New students with IEPs, Section 504 Plans, and EL services that move from one Michigan school to another must be identified quickly so that supports and accommodations from the previous school can be implemented.
- Plan ahead. The OSA recommends that schools/districts maintain a spreadsheet of students with each student's needed supports and accommodations by subject area. A template can be found on the <u>M-STEP web page</u> (www.michigan.gov/ mstep).
- Ensure that each student is taking the correct test (M-STEP or MI-Access) for each subject area. Students who mistakenly take the wrong test(s) may have to take an emergency test to gain a valid score. An Incident Report must be filed.
- Audio CDs, video DVDs, Reader Scripts, and Read-Aloud Guidelines must be used when test content is to be read aloud as a designated support or accommodation.
- An M-STEP test administered with an incorrect accommodation based upon the IEP is considered invalid. The student must take a new (emergency) test to gain a valid score. An Incident Report must be filed.



- Paper/pencil testers must take the entire test in the same form of the test. Do not split form numbers within tests or parts of tests. Please be sure to administer all parts of the tests.
- When students with supports and accommodations use audio CDs, video DVDs, and Reader Scripts in small groups of up to five students, extra Form 1 test booklets may be needed. When ordering, be sure to specify the number of students using each accommodation kit.
- Some supports and accommodations, such as using a scribe, do not require Form 1 test booklets. Use the form assigned to the school.
- Do not begin a subject-area test before the initial test date. Students who are absent on the initial test day may begin testing on the makeup date for the missed subject area.

- Students may refuse to use a support or accommodation. If this happens, try to resolve the situation with the students' parents/guardians immediately. Document any change approved by parents/ guardians.
- Audio CDs, Reader Scripts, or DVDs may not be used with Braille kits.
- Standard Answer Documents ar used with the enlarged print and Braille versions of the M-STEP tests.
- Braille and enlarged print kits are ordered by student on the Material Order page.



Online Supports and Accommodations

By using the numbers associated with each support or accommodation (see below), schools can identify which supports listed in eDIRECT match those within the <u>Supports and Accommodations</u> <u>Table</u>. Please also refer to the <u>Supports and Accommodations Manual</u> for more information related to these supports' administrative practices. Because there are variations between grades and content areas for allowable supports, schools must refer back to the supports and accommodations table for detailed information. Both documents can be found on the <u>M-STEP web page</u> (www.michigan.gov\mstep) in the **Student Supports and Accommodations section**.

The following supports and accommodations must be turned on in eDIRECT <u>before</u> test tickets are printed:

15	Color Choice (CC)
16	Contrasting Color (CTC)
17	Reverse Contrast (RC)
14	Masking (MSK)
9	Spanish Translation (stacked) (ST)
31	Text-to-Speech—Items and Passages (TTSPASSAGE)
6	Text-to-Speech (TTS)
26	Video Sign Language (test content) (VSL)
33	Closed Captioning (CCAPTION)

Use of the following supports and accommodations must be tracked by subject in eDIRECT

1	Administered individually/small group	14	Masking
29	English dictionary	18	Scribe (Non-Writing items)
30	Thesaurus	30	Scribe (Writing items)
4	Noise Buffers	22	OSA Multiplication Tables (grades 4 and above)
5	Oral Translated Test Directions	23	Abacus
8	Read Aloud (Human Reader)	24	Non-Embedded Calculator (Accommodation ONLY for use on calculator items)
11	Bilingual word-to-word dictionary	25	Administrator Sign Test Directions in ASL
12	Auditory Amplification	26	Administrator Sign Test Content in ASL
13	Visual Aids	27	Alt communication devices





$\mathcal{M}_{\mathrm{-Step}^{\mathrm{m}}}$ Supports and Accommodations Companion Document

Paper/Pencil Supports and Accommodations

By using the numbers associated with each support or accommodation, schools can identify which supports listed on the Student Answer Document match those within the <u>Supports</u> and Accommodations Table. Please also refer to the <u>Supports and Accommodations Guidance</u> <u>Document</u> for more information related to these supports' administrative practices. Because there are variations between grades and content areas for allowable supports, schools must refer back to the supports and accommodations table for detailed information. Both documents can be found on the <u>M-STEP web page</u> (www.michigan.gov/mstep) in the **Student Supports and Accommodations section**.

Use of the following supports and accommodations must be marked on the Student Answer Document:

	Accommodation	ELA	Math	Science	Social Studies
5	Directions Read in Native Language	~	~		
5/35	Oral Translation in Native Language		~	~	~
9	Spanish Booklet		~		
21	Enlarged Print*	~	~	~	~
19	Multiple-Day Testing	~	~	~	~
35	Audio CD*			~	~
36	English DVD*			~	~
36	Spanish DVD*			~	~
36	Arabic DVD*			~	~
34	Reader Script*			~	~
27	Alternate Response	~	~		
25/26	American Sign Language (ASL)	~	~		
4	Noise Buffers	~	~		
8/31	Read Aloud (must see Supports/ Accommodations Table for specifics)	~	~		
18/30	Scribe	~	~		
27	Speech-to-Text	~	~		
23	Abacus		~		
10	L1 Glossary		~		
	Other	~	~	~	 ✓
	Nonstandard Accommodation/Support	~	~	~	~

*Must use Form 1 test booklet.



Materials Return Instructions

All test materials must be managed in some way **after each test window closes**. This includes used and unused test booklets (standard, Braille, and enlarged print), used and unused Answer Documents (student completed and adult transcribed), CDs, DVDs, word-processed pages, scratch paper, graph paper, Listening Scripts, Listening CDs, Reader Scripts, and so forth. The table below shows what to do with each material once testing is complete.

How to Process M-STEP Test Materials After Testing

Secure Test Materials	Return to M-STEP Contractor	Schools Keep	Schools Destroy
Used Answer Documents (all content areas)	Scorable box(es)		
Unused ELA and mathematics Answer Documents	√ *		
Student Test Tickets and Test Rosters			1
Used Orange Special Handling Envelope(s) with contents	Scorable box(es)		
Used and Unused Test Booklets (grades 3-8 & 11)	✓*		
Accommodated versions of the test (Reader Scripts, Braille, enlarged print, audio CD, video DVD, translated versions, etc.)	√ *		
ELA Listening CDs	√ *		
ELA Listening Scripts	√ *		
LI (First language) Glossaries (mathematics)			1
Used scratch paper (including graph paper)			1

*Can be returned with the scorable materials, or in a separate box as directed in "Instructions for Packing Non-scorable Materials for Return," information on "Instructions for Packing Non-scorable Materials for Return" on page 85.

How to Process M-STEP Test Materials After Testing (cont'd.)

Non-Secure Test Materials	Return to M-STEP Contractor	Schools Keep	Schools Destroy
Used Reporting Code Sheets	Scorable box(es)		
Unused Reporting Code Sheets			~
Unused science and social studies Answer Documents			~
Unused Orange Special Handling Envelopes			~
Test Administration Manuals		Optional	
Test Administration Directions		Optional	
Signed OSA Security Compliance Forms		Store at District for 3 years	
Seating charts		Store at District for 3 years	

Return Tools

The M-STEP contractor has provided districts/ schools with a number of tools for returning materials, including:

- orange Special Handling Envelopes
- FedEx Express Airbills for shipping
- **blue scorable stickers** for the outside of boxes containing scorable materials

Districts and schools are encouraged to complete and return test materials as early as possible following each grade-specific testing window. (See the "Important Dates" on page 8 of this manual for window dates.) The M-STEP scoring contractor can then begin to scan and score student responses immediately. Fees are assessed for the late return of scorable materials.

Additional return materials may be ordered if needed during the Additional Material Order window.

Return Shipping Schedule

The "Materials Return Dates" table on page 11 of this manual shows the dates by which Answer Documents must be returned for each testing window. It also shows the **late fees and penalties that will be applied when materials are not returned promptly**.

Security Compliance Forms and Seating Charts

Building M-STEP Coordinators need to give their school's signed OSA Security Compliance Forms to the District M-STEP Coordinator who will keep them on file for a minimum of **three years**. Do not return these forms to the M-STEP contractor.

Reporting Code Header Sheet

Schools may associate a teacher name or other label with Reporting Codes using the optional Reporting Code Header sheet. The sheet is only needed if the school wants labels associated with the four digit reporting code. Reporting codes can be assigned to students by content by bubbling the answer document or assigning the codes through the secure site.

Preparing Answer Documents for Return

The Orange Special Handling Envelope

The orange Special Handling Envelope(s) is used for the following materials:

- Damaged Answer Documents that are **not** biohazards
- Used Answer Documents that the school has invalidated by printing "Do Not Score" prominently on the front page
- All word-processed pages and additional paper with complete student information inserted in each student's Answer Document, for students who required this accommodation.

Set aside the completed orange Special Handling Envelope(s) with its contents. The envelope(s) will need to be **placed at the top of Box 1 prior to sealing the box and shipping it**.

Organizing Answer Documents for Verification

Follow these steps for preparing M-STEP Answer Documents for return to the M-STEP contractor **at the end of each testing window**:

First, organize the Answer Documents into stacks for each grade level being tested in your school. (For example, 5th grade will have a discrete Answer Document stack for mathematics, ELA, and social studies at the end of the grade 5 and 8 window. Eighth grade will have a discrete Answer Document stack for the same content areas.)

If there are students who used an enlarged print or Braille version of the test, they must have a Test Administrator transcribe their responses onto a regular Answer Document. Starting this year, transcribed Answer Documents may be returned along with the other used Answer Documents (that is, they no longer have to be returned in the orange Special Handling Envelope).

Reviewing/Verifying Answer Documents

Once the Answer Documents are separated into stacks, review them using the following steps. Be sure to conduct this review for **each** stack of Answer Documents at the end of each grade-specific testing window.

Initial Checks/Verifications

For each stack, verify that:

- all Answer Documents are for the same grade level and same subject area
- all Answer Documents are for M-STEP (not MI-Access, ACT WorkKeys, or SAT)
- only No. 2 pencils have been used
- no correction fluid, crayons, markers, highlighters, or colored pencils have been used

- any sticky notes, paper clips, rubber bands, staples, glue, or other extraneous materials from inside and outside the Answer Documents and Reporting Code Sheets have been removed
- all used Answer Documents for the grades tested in the particular test window will go into the scorable boxes
- all **unused** ELA and mathematics Answer Documents will be **returned**, along with the secure test booklets, in either a scorable materials box or in a box affixed with a FedEx label and shipped back to the M-STEP Scoring Contractor. A non-scorable label is no longer needed in order to return nonscorable materials.
- all unused science and social studies
 Answer Documents are placed in an area away from the other used (and unused ELA and Mathematics) Answer Documents (These verified unused Answer Documents should be shredded immediately following shipment of all other M-STEP materials back to the scoring contractor.)

Individual Answer Document Checks

Once all the Answer Documents are in stacks but **before** packing them into scorable boxes, review each individual Answer Document to ensure that:

- the student information has been completed at the top of the Answer Document (student's legal name, teacher name, school name, district or PSA)
- the Student Birth Date field has been filled in accurately
- if Reporting Codes are being used (optional), the Reporting Code number has been filled in on each Answer Document
- the Assessment Date and Test Form Number fields have been filled in accurately

- the Applicable School Use Only bubbles are correctly completed
- each Answer Document has an undamaged barcode label adhered carefully within the designated frame (A \$10 fee may be assessed for every Answer Document returned for scoring without a barcode label.)
- the student name and school name on each barcode label matches the student information at the top of the Answer Document

It is **not** permitted to review Answer Documents for completion at this time. Test Administrators are responsible for ensuring that students have completed testing prior to collecting the materials from students and returning them to the Building M-STEP Coordinator.

Final Checks/Verifications

As a final check, verify that a used Answer Document is present for each enrolled, M-STEP-eligible student in each subject area tested in a grade level.

Packing Scorable and Non-scorable Materials for Return

Either the district M-STEP coordinator or the school M-STEP coordinator may return materials for scoring through FedEx Express shipping. Regardless of which coordinator is returning materials, the packing instructions are the same. **Please follow the instructions below when packing scorable materials.**

It is **vital** that used answer documents be returned in boxes marked with a blue scorable label. Failure to return answer documents properly can jeopardize a school's accountability calculations.

Instructions for Packing Scorable Materials for Return

- 1. Organize used answer documents by grade and then by subject area for the appropriate test window.
- Pack used answer documents in boxes using cushioning materials, if needed, to keep them secure. Schools should use the same boxes in which the materials originally arrived to ship the materials to M-STEP Scoring Services (the M-STEP scoring contractor). If these boxes are not available, use sturdy boxes to return the materials. **Do not use boxes in** which copy paper is packed.
- When returning multiple boxes of scorable materials, please place the completed orange Special Handling Envelope (if used) and the Reporting Code Sheets (optional) at the top of the contents of the first box prior to sealing the box.
- 4. NOTE: Used answer documents and other secure materials, (e.g., test booklets) may be returned in the same box when only one box is being returned. When returning all materials in the same box, please place the scorable materials, Special Handling Envelope, and Reporting Code Sheets on top and separate the scorable materials from the nonscorable materials with a sheet of paper. Place a blue Scorable label on the top of the box.
- Remove or black out any old shipping labels on boxes, including the original shipping barcode, and seal the boxes with plastic shipping tape. Please place three strips of tape on the top of each box and three strips of tape on the bottom of each box.
- 6. Affix a **blue Scorable label** to the **top** of **all** boxes containing used answer documents.

7. In addition to the **blue Scorable label**, affix a FedEx Express Air bill to the first box of your scorable materials boxes. The FedEx Express driver will produce additional multiple piece shipment labels and affix to them to the remaining boxes of scorable materials.

Only one box in a shipment needs a FedEx Express Airbill. Do not tamper with the preprinted information on the Airbill in any way, as this may affect FedEx processing and delay your shipment.

Instructions for Packing Non-scorable Materials for Return

- Pack all used and unused test booklets, all unused ELA and Mathematics answer documents, and any accommodated materials in the boxes using cushioning materials to keep them secure. All CDs, DVDs, Reader Scripts, ELA Listening CDs, ELA Listening Scripts, Enlarged Print, and/or Braille materials must be returned. Please pack CDs and DVDs at the top of the box(es). It is preferable to use the same boxes that the materials originally came in to ship the materials to M-STEP Scoring Services (the M-STEP scoring contractor).
- 2. Remove or black out any old shipping labels, including the original shipping barcode, and seal the boxes with plastic shipping tape. Please place three strips of tape on the top of the boxes and three strips of tape on the bottom of the boxes. (Boxes that contain only nonscorable materials no longer need a nonscorable label.)

Only one box in a shipment needs a FedEx Express Airbill. Do not tamper with the preprinted information on the Airbill in any way as this may affect FedEx processing and delay the shipment.

Instructions for Returning All Materials via FedEx Express

- 1. Place the boxes where the FedEx driver normally delivers or picks up packages.
- To schedule a pickup, call 1-800-GoFedEx (1-800-463-3339). After the voice prompt ("Welcome to FedEx. In a few words, please tell me what you're calling about."), you can press 9 or say, "Premiere Customer Service Program."
- 3. When prompted, enter 999 999 933 as the nine-digit FedEx account number. You should be transferred to a specialized Premier Customer Service Representative. If all Premier Customer Service Representatives are busy, your call may be forwarded to a regular Customer Service Representative. A Premier Customer Service Representative will be able to answer more M-STEP-specific questions than a regular Customer Service Representative, should you have any, but either will be able to help you schedule your M-STEP pickup if you specify that you need to schedule a FedEx Express **pickup** for the M-STEP project.

- 4. Please have the following information available when you call:
 - your phone number (if you have called to schedule FedEx pickups or ship materials prior to this call, FedEx will have your address information in their system; otherwise, this information will need to be provided)
 - the pickup date
 - the total number of boxes you are returning
 - the average box weight (you can use 30 pounds per box)
- If you do not have enough Scorable labels and/or FedEx Express Airbills, contact your district M-STEP coordinator, who can order them on the Additional Materials Order page and select "ship to district."
- Any remaining Scorable labels and FedEx Express Airbills can be used later for other testing windows if needed. After returning all of your materials for this project, destroy any remaining FedEx Express Airbills, as these are year-specific.

Important: Keep the sender's copy of the FedEx Express Airbill for each package so that you can easily track your packages. If requested, the FedEx Express driver will supply small adhesive tracking labels. These labels will match the multiple-piece shipment labels on your packages.

Diagram for Packing Scorable Materials



Example: Assembling Answer Documents for Return After the Grades 5, 8, and 11 Testing Window

	Materia	als Return Date	es	
Grades	Final date to ship without penalty and inclusion in Answer Document Verification	Shipping dates with \$250 late fee charge	Shipping dates with \$250 late fee and \$25 processing fee per Answer Document	Dates after which materials will NOT be scored
Grades 5, 8 and 11	May 3, 2017	May 4-10, 2017	May 17, 2017	May 18, 2017
Grades 3, 4, 6 and 7	May 24, 2017	May 25–31, 2017	June 7, 2017	June 1, 2017

Appendix A

Spring 2017 M-STEP Calculator Policy

Online and Paper/Pencil Testers

Students in grades 3, 4, and 5 are **not** allowed to use a calculator on ANY item in the mathematics assessment as the use of calculators at these grade levels changes the construct of the items and what they are intended to measure. All students must abide by this no-calculator allowed policy, even students whose IEP or 504 Plan specifies otherwise. The use of a calculator at grades 3, 4, or 5 is considered a nonstandard accommodation. Nonstandard accommodations render the assessment invalid.

Online Testers

Students in grades 6, 7, and 8 will use the calculator embedded within the online delivery engine. The calculator will appear in the toolbar when items allow its use; it will not appear when items do not allow its use.

There are two types of embedded online calculators:

- Grade 6—basic calculator
- Grades 7 and 8-scientific calculator

The Office of Assessment and Accountability (OSA) has developed resources for online testers to help prepare them for online testing. One of the resources is an online calculator practice tool. It is recommended that online testers visit the practice environment to see sample items and familiarize themselves with the online calculator tool. To practice using the M-STEP online calculators, go to the <u>OTT portal</u> (https://wbte.drcedirect.com/MI/portals/mi/) using the Google Chrome browser.

Paper/Pencil Testers

Students in grades 6, 7, and 8 will use a hand-held calculator. The test booklets are divided into three parts. Part 1 of the paper/ pencil mathematics assessment is considered

non-calculator, and students must not have a calculator within reach. Parts 2 and 3 of the paper/pencil mathematics assessment allow the use of a calculator. Once students start Part 2, they are not allowed to return to the non-calculator items in Part 1. Since external hand-held graphing calculators are programmable, there is a potential of a security breach. All programmable calculators must be set to TEST mode during the testing session.

Types of hand-held calculators:

- Grade 6—basic
- Grades 7 and 8—scientific

Important Notes

Alignment

The operational items on all of the assessments have been field-tested and are aligned to Michigan's standards.

Fairness

The issue of fairness between online testers and paper/pencil testers with regard to calculator usage has been raised. OSA decided not to burden schools by requiring them to purchase calculators specifically for this assessment as a possible one-time use. Some schools may not have the grade-specific calculators for their paper/pencil testers to use. OSA has reviewed every mathematics item to determine if the use of an abovegrade-level calculator gives those students an advantage. Students will not be advantaged or disadvantaged based on using an above-grade calculator on the mathematics assessment.

Managing Online Testers and External Hand-held Calculators

The OSA prohibits online testers from using external hand-held calculators instead of the embedded online calculator. The only online testers who may use an external calculator are those students whose IEP or Section 504 Plan specifies the use of a special adaptive calculator.



Appendix B

Spring 2017 M-STEP Scratch Paper Policy

Scratch paper is an optional universal tool that may be made available to students during testing. Used scratch paper is a **secure** material. District Coordinators should develop and disseminate procedures for the secure handling and disposal of used scratch paper.

ONLINE TESTERS: MATHEMATICS

- Scratch paper is allowed in all test sessions and test parts. For students in grades 6-8, **blank** graph paper, which can serve as the scratch paper, is required and was provided in the online initial material order. The grades 3-5 tests do not include items that require graph paper. Additional graph paper can be downloaded from the <u>M-STEP web</u> <u>page</u> (www.michigan.gov/mstep).
- For grades 3-5 scratch paper must be blank ruled, unruled, or graph paper.
 Grades 6-8 must be blank graph paper.
- Fresh scratch paper must be distributed at the start of each new test session. That is, when a student receives a new test ticket for log in, then a fresh sheet of scratch paper must be provided at that time. Once a test session is completed, used scratch paper must be returned with the test tickets to the Building Coordinator for secure shredding.
- Students must write their names on the scratch paper. When students are provided a break, the scratch paper must be collected and securely stored with test tickets until testing resumes. If the scratch paper is clearly identified with each student's name, then the scratch paper may be redistributed when students resume testing within a test session. If not, fresh scratch paper is required.

ONLINE TESTERS: ENGLISH LANGUAGE ARTS, SCIENCE, AND SOCIAL STUDIES

- Scratch paper is allowed in all test sessions and test parts. For all grades this must be **blank** ruled or unruled paper.
- Fresh scratch paper must be distributed at the start of each new test session. That is, when a student receives a new test ticket for log in, then a fresh sheet of scratch paper must be provided at that time. Once a test session is completed, used scratch paper must be returned with the test tickets to the Building Coordinator for secure shredding.
- Students must write their names on the scratch paper. When students are provided a break, the scratch paper must be collected and securely stored with test tickets until testing resumes. If the scratch paper is clearly identified with each student's name, then the scratch paper may be redistributed when students resume testing within a test session. If not, fresh scratch paper is required.

PAPER/PENCIL TESTERS: MATHEMATICS

 Scratch paper is allowed in all test sessions and test parts. For grades 3-5 this must be blank ruled, unruled, or, optionally, graph paper. Grades 6-8 may be provided blank graph paper in place of blank ruled or unruled paper, however students may use the graphs in their test booklets to solve problems. If graph paper is provided it can be downloaded from the M-STEP web page (www.michigan.gov/mstep). Please note that ample room is provided in the test booklets for note taking and problem solving activities.

- Fresh scratch paper must be distributed with each "part" of a test and students must write their names on the scratch paper. After students encounter a Stop Sign in the test booklets, scratch paper must be collected and securely stored until it can be returned with the rest of the test materials to the Building M-STEP Coordinator for shredding. If paper/pencil testers are provided a break not associated with a test part, then used scratch paper must be placed inside their closed test booklets.
- In order to prevent the use of an inappropriate writing utensil on the answer document, students should only have access to number 2 pencils during paper/ pencil testing.

PAPER/PENCIL TESTERS: ENGLISH LANGUAGE ARTS

- Scratch paper is allowed in all test sessions and test parts. For all grades this must be **blank** ruled or unruled paper. **Please note** that ample room is provided in the test booklets, for note taking and planning activities.
- Fresh scratch paper must be distributed with each "part" of a test and students must write their names on the scratch paper. After students encounter a Stop Sign in the test booklets, scratch paper must be collected and securely stored until it can be returned with the rest of the test materials to the Building M-STEP Coordinator for shredding. If paper/pencil testers are provided a break not associated

with a test part, then used scratch paper must be placed inside their closed test booklets.

 In order to prevent the use of an inappropriate writing utensil on the answer document, students should only have access to number 2 pencils during paper/ pencil testing.

PAPER/PENCIL TESTERS: SCIENCE AND SOCIAL STUDIES

- Scratch paper is allowed in all test sessions and test parts. For all grades this must be blank ruled or unruled paper. Please note that ample room is provided in the test booklets for note taking and problem solving activities.
- Fresh scratch paper must be distributed with each "part" of a test and students must write their names on the scratch paper. After students encounter a Stop Sign in the test booklets, scratch paper must be collected and securely stored until it can be returned with the rest of the test materials to the Building M-STEP Coordinator for shredding. If paper/pencil testers are provided a break not associated with a test part, then used scratch paper must be placed inside their closed test booklets.
- In order to prevent the use of an inappropriate writing utensil on the answer document, students should only have access to number 2 pencils during paper/ pencil testing.





M-STEP Incident Reporting Guide

If any testing irregularities occur before, during, or after testing, the District M-STEP Coordinator must report them to the Office of Student Assessment as soon as possible. This table identifies the incident categories and sub-categories that are used in the Secure Site Incident Reporting tool and sample scenarios for each category or sub-category.

You will find detailed information on how to access and use the Secure Site Incident Reporting tool here (http://www.michigan. gov/documents/mde/Incident_Reporting_520328_7.pdf).

	Incident	Category: Test Not Com	pleted	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Test Submitted prior to completion	Student accidentally ends/ submits test without answering all questions.	If 5 or fewer questions have been answered, contact the Call Center at 1-877-560-8378 Option 2. If more than 5 questions have been answered, an Incident Report is required.	N/A	Online: Required if more than 5 item responses Paper/ Pencil: N/A
Student became ill	Student becomes ill and goes home before finishing a test.	Pause and Exit test (do not End test). Resume testing with the original test ticket in a make-up session.	Collect test materials and flag last question answered. Resume testing in an individual one-on-one proctored make-up session. Students are not allowed to return to previously answered questions.	Online: Optional Paper/ Pencil: Required

("Test Not Completed" incident category continues on the next page.)

	Incident	Category: Test Not Com	pleted	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Student was removed from school by parent/ guardian	Student is removed from class by parent or guardian during the test administration.	Pause and Exit test (do not End test). Resume testing with the original test ticket in a make-up session.	Collect test materials and flag last question answered. Resume testing in an individual one-on-one proctored make-up session. Students are not allowed to return to previously answered questions.	Online: Optional Paper/ Pencil: Required
Student Moved from School	Student transfers or moves from school with an incomplete content area test. Note: Be prepared to accept a phone call from student's receiving school requesting information on test completion and needed accommodations or designated supports.	N/A	Mark the Answer Document " Do Not Score " and return in the Special Handling Envelope.	Online: Required Paper/ Pencil: Required
"Do Not Score " Requested	Student transfers or moves from school with an incomplete content area test. Note: Be prepared to accept phone call from receiving school requesting information on test completion and accommodations or designated supports.	Submit incident report with request for test to be marked " Do Not Score."	N/A	Online: Required Paper/ Pencil: N/A

("Test Not Completed" incident category continues on the next page.)



	Incident	Category: Test Not Com	pleted	
Incident ub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
udent does ot complete ist by end of ay	Student does not complete testing by the end of the school day. Note: testing must be completed by the end of the grade level testing window. There are no exceptions.	Pause and Exit test (do not End test) Resume testing with the original test ticket in a make-up session.	 With proper planning and scheduling, this should be avoided: Schedule all testing early in the day to allow students to complete required testing. Schedule must allow for students who require additional time. Consider the multiple day testing designated support— this is allowable as intentional scheduling for some students. Exceptions for individual students who use additional students. Exceptions for individual student will be considered on a case-by- case basis. The required Incident Report must demonstrate student was provided ample time to complete the test. 	Online: No Incident Report necessary Paper/ Pencil: Required

M-STEP Test Administration Manual

	Test Accomm	Incident Category: odation/Designated Sup	port Issue	
ent tegory	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
ted / d nodation /ided	Student is not provided appropriate designated support or accommodations.	Test misadministration. Submit an Incident Report. New test with appropriate designated support or accommodation may be administered with notification to and approval of parents or guardians.	Test misadministration. Submit an Incident Report. Emergency test with appropriate designated support or accommodation may be administered with notification to and approval of parents or guardians. Original answer document must be marked " Do Not Score " and returned in the orange Special Handling Envelope.	Online: Required Paper/ Pencil: Required
idard ted / nodation	Nonstandard Accommodation provided. See the "Nonstandard Accommodations" information on page 69 of the Test Administration Manual.	Mark the student's test as Nonstandard Accommodation on the Test Codes screen in eDIRECT. The student's test is invalidated. Inform parents or guardians. Submit an Incident Report— working with the OSA, in some cases students may be able to retest with the appropriate accommodation—if the student's parents and school agree it is in the best interest of the student. Perform an internal investigation as needed and keep the resulting documentation on file as Nonstandard Accommodations may be appealed during the Answer Document Verification window.	Mark the student's test as Nonstandard Accommodation on the answer document and return with scorable materials. The student's test is invalidated. Inform the parent or guardian. Submit an Incident Report— working with the OSA, in some cases students may be able to retest with the appropriate accommodation—if the student's parents and school agree it is in the best interest of the student. Perform an internal investigation as needed and keep the resulting documentation on file as Nonstandard Accommodations may be appealed during the Answer Document Verification window.	Online: Required Paper/ Pencil: Required



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	TUCIGENI	t Category: Misadministr	ation	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Wrong test administered	Student is administered the incorrect test (for example, an M-STEP test instead of a MI-Access test).	Inform parents or guardians. Students must be assigned to the correct test in the Secure Site and the appropriate test must be given. Submit an Incident Report—the test will be marked " Do Not Score ".	Inform parents or guardians. Mark the answer document with " Do Not Score " and return in the orange Special Handling Envelope. Student must be given the correct test—material orders should be ordered on the Secure Site using the normal additional material order process.	Online: Required Paper/ Pencil: Required
Wrong test ticket used	Student is issued wrong test ticket and begins the test.	Stop the test as soon as the error is identified. Pause and Exit the test (do not End the test) Submit an Incident Report.	N/A	Online: Required Paper/ Pencil: N/A
Part missed or not administered	Student is not administered one part of a test.	If it is identified within the testing window for the grade, administer the test. If it is past the testing window for the grade, submit an Incident Report. The test may not be administered.	If it is identified on the day of the administration or within the make- up window for the subject and grade, administer the test. If it is not identified on the test day or within the make-up window for the subject and grade, submit an Incident Report.	Online : Optional Paper / Pencil : Optional

("Misadministration" incident category continues on the next page.)

	Incident	: Category: Misadministr	ation	
lent tegory	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
answer ent used	Student uses wrong answer document when testing.	N/A	If the wrong answer document is the correct grade and test, but has the wrong barcode label, then a new correct barcode label, then a new correct barcode label should be printed and affixed. An Incident Report is not required. If the answer document is the wrong grade and/or content, then mark the wrong answer document(s) used with " Do Not Score " and return in the orange Special Handling Envelope. Submit an Incident Report. (See "Answer document transcription required/suggested" Incident Sub-Category on page 102.)	Online: N/A Paper/ Pencil: Required (except when replacing barcode labels)
t stered eduled ie	Test is administered outside of scheduled testing window, or a paper/pencil test is administered in a day that is not assigned for the content/part or not administered during scheduled make-up dates.	N/A	Mark student's answer document " Do Not Score " and return in the orange Special Handling Envelope. Submit an Incident Report.	Online: N/A Paper/ Pencil: Required
	Other misadministration not previously listed.	Varies	Varies	Online: Required Paper/ Pencil: Required



www.michigan.gov/mstep ■ https://mi.drcedirect.com FOR HELP, call 1-877-560-8378

	Incident	Category: Building Emei	rgency	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Building Emergency	Building emergency occurs during the test and requires student(s) to leave the room or otherwise interrupts testing.	Address the building emergency— pause tests as appropriate/ possible. Submit an Incident Report.	Address the building emergency– secure test materials as appropriate/possible. Submit an Incident Report.	Online: Required Paper/ Pencil: Required

	Pencil IR Required/ Optional	s Student e answer test is ins. Required tion Paper/ prohibited Pencil: ad during Required ification t.
shavior (Response for Paper/ Testers	Mark the student's test as Prohibited Behavior on the document. The student's t invalidated. Inform parents or guardia Perform internal investigat as needed and keep result documentation on file as F Behaviors may be appeale the Answer Document Ver window. Submit an Incident Report
Category: Prohibited Be	Response for Online Testers	Mark the student's test as Prohibited Behavior on the Test Codes Screen in eDIRECT. The student's test is invalidated. Inform parents or guardians. Perform internal investigation as needed and keep resulting documentation on file as Prohibited Behaviors may be appealed during the Answer Document Verification window. Submit an Incident Report.
Incident	Scenario	Taking photos of test items, use of social media during testing.
	Incident Sub-Category	Electronics/ Social Media

("Prohibited Behavior" incident category continues on the next page.)

M-STEP Test Administration Manual

	IR Required/ Optional	Online: Required Paper/ Required
havior	Response for Paper/Pencil Testers	Students engaged in disruptive or egregious behavior must be removed from the testing room. Where feasible, students should be redirected and allowed to continue testing. Students engaged in prohibited behavior need not be removed from the testing room unless they are affecting other students. Mark the student's test as Student Prohibited Behavior on the answer document. The student's test is invalidated. Inform parents or guardians. Perform internal investigation as needed and keep resulting documentation on file as Prohibited Behaviors may be appealed during the Answer Document Verification window. Submit an Incident Report.
category: Pronibited Be	Response for Online Testers	Students engaged in disruptive or egregious behavior must be removed from the testing room. Where feasible, students should be redirected and allowed to continue testing. Students engaged in prohibited behavior need not be removed from the testing room unless they are affecting other students. Mark the student's test as prohibited Behavior on the Test Codes Screen in eDIRECT. The student's test is invalidated. Inform parents or guardians. Perform internal investigation as needed and keep resulting documentation on file as Prohibited Behaviors may be appealed during the Answer Document Verification window. Submit an Incident Report.
Incident C	Scenario	Disruptive behaviors impacting testing session/completion, cheating, use of calculator (mathematics) or dictionary/ thesaurus (ELA) during non- permitted section of the test. Note: The use of non-permitted tools results in test invalidation.
	Incident Sub-Category	Other





	Incident Category:	Technical Problems wit	h Online Testing	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Repeated	Student(s) has repeated disconnections during testing session.	Contact local tech support. Tech support can contact DRC Customer Support if they need additional help to resolve the matter. Submit an Incident Report.		Online: Optional Paper/ Pencil: N/A
disconnections	Entire classroom has repeated disconnections during testing session.	Contact local tech support. Tech support can contact DRC Customer Support if they need additional help to resolve the matter. Submit an Incident Report.		Online : Optional Paper/ Pencil : N/A
INSIGHT freezing, crashing, or not advancing	INSIGHT stops working and the student(s) cannot continue testing.	Contact local tech support. Tech support can contact DRC Customer Support if they need additional help to resolve the matter. Submit an Incident Report.	N/A	Online: Optional Paper/ Pencil: N/A
TSM error	TSM Connection Error—Could Not Register TSM	Contact local tech support. Tech support can contact DRC Customer Support if they need additional help to resolve the matter. Submit an Incident Report.	N/A	Online: Optional Paper/ Pencil: N/A

("Technical Problems with Online Testing" incident category continues on the next page.)

	Incident Category:	Technical Problems wit	h Online Testing	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Item functionality	An item on the test is not functioning as expected. For example, the student believes the correct answer cannot be selected.	Instruct the student to answer as best they are able. Submit an Incident Report with the test and question number, and computer used for testing (Windows PC, Mac, iPad, Chromebook).	N/A	Online: Required Paper/ Pencil: N/A
Hardware failure	Power outage, Internet connection interrupted through local error, stolen computers.	If the problem is with just one computer, please move the student to another computer and resume testing. If the problem will be resolved in sufficient time to complete testing (restore power or internet connection), please continue testing another time or day. If online testing becomes impossible, please file an incident report.	N/A	Online: Required IF it is necessary to move to emergency paper forms; otherwise optional Paper/ Pencil: N/A
Other	Use this category if your technical problem does not conform to the listed technical issues.	Please contact your local IT staff, or, if further support is required, contact DRC Customer Support.	N/A	Online: Optional Paper/ Pencil: N/A



		Incident C	ategory: Materials	
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Answer document transcription required/ suggested	Students write in the wrong section of an assessment; wrong answer document used; a writing utensil other than a number 2 pencil is used on an answer document.	N/A	Student must transcribe all responses exactly as recorded from the original answer document to a fresh answer document in a one-on-one proctored section. Print and affix a bar code label to the new answer document and return with the scorable materials Original answer document must be marked " Do Not Score " and returned in the orange Special Handling Envelope.	Online: N/A Paper/ Pencil: Required
Damaged, defective, or lost	Answer Document becomes damaged in such a way that will impact scanning- ripped, torn, etc; is defective upon arrival, or is lost during test administration.	N/A	Student must transcribe all responses exactly as recorded from the original answer document in a one-on-one proctored session. Print and affix a bar code label to the new answer document and return with the scorable materials. Original answer document must be marked " Do Not Score " and be returned in the Orange Special Handling Envelope. NOTE: Biohazards should not be returned.	Online: N/A Paper/ Pencil: Optional

	I	cident Category: Other		
Incident Sub-Category	Scenario	Response for Online Testers	Response for Paper/Pencil Testers	IR Required/ Optional
Other	Use this category only if an incident occurs that does not fit into the listed categories.	Varies	Varies	Online: Optional Paper/ Pencil: Optional

Appendix D

eDIRECT User Guide

The eDIRECT User Guide discusses eDIRECT, the interface to the administrative functions of the DRC INSIGHT Online Learning System.

The guide is divided into three main sections:

- Working with eDIRECT describes how to access and log into eDIRECT, as well as some of its more common menu functions and options,
- **Test Setup** describes the test setup options for editing student information and test sessions, and
- Checking Student Testing Status describes the options for monitoring student testing status in eDIRECT.

Access the full guide in <u>eDIRECT</u> (https:// mi.drcedirect.com). Go to All Applications \rightarrow General Information \rightarrow Documents \rightarrow Document Type: Manuals and Directions.



Appendix E

2017 M-STEP List of Important Dates

Important Dates	Task / Activity	Mode
10/24/16-11/23/16	Online waiver window-request waiver to administer paper/pencil	PP
11/07/16-02/27/17	Off-site Test Administration Requests window	Both
01/09/17—05/26/17	Pre-identification of students window	Both
01/09/17—02/14/17	Pre-identification of students for barcode labels	PP
01/09/17—02/14/17	Initial Material Order window (all grades)	PP
01/09/17—02/27/17	Online test session setup in the Secure Site	OL
01/09/17—02/03/17	Alternate Material Delivery Request window	PP
01/16/17—05/26/17	Off-site Test Administration Request window (for individual students such as homebound or expelled with service students)	РР
01/19/17—02/09/17	Alternate Insight Availability Request window	OL
02/28/17	Online District and Building Coordinator Training WebEx—eDIRECT & Test Setup—watch Spotlight for details	OL
03/07/17—05/26/17	eDIRECT available for online test administrative tasks	OL
03/27/17—03/29/17	Grades 5, 8 and 11 materials arrive in schools—alternate delivery date not requested	Both
04/03/17—04/05/17	Grades 5, 8 and 11 materials arrive in schools—alternate delivery date requested	Both
04/04/17—05/02/17	Grades 5, 8 and 11 Additional Material Order window (closes at noon)	PP
04/10/17—05/05/17	Grades 5, 8 and 11 Online Test Administration window	OL
04/11/17	Grades 5 and 8 ELA Day 1 Paper/Pencil Test Day*	PP
04/12/17	Grades 5 and 8 ELA Day 2 Paper/Pencil Test Day*	PP
04/12/17—late August	Preliminary Reports (within 48 hours of online submit)	OL
04/13/17	Grades 5 and 8 ELA Day 3 Paper/Pencil Test Day*	PP
04/13/17	Grade 11 Science and Social Studies Test Day*	PP
04/14/17-04/17/17	Grade 5 and 8 ELA Makeup	PP
04/18/17—04/19/17	Grades 3, 4, 6 and 7 materials arrive in schools (alternate delivery date not requested)	Both

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Important Dates	Task / Activity	Mode
04/17/17—04/28/17	Grade 11 Science and Social Studies Makeup	PP
04/18/17	Grades 5 and 8 Mathematics Day 1 Paper/Pencil Test Day*	PP
04/19/17	Grades 5 and 8 Mathematics Day 2 Paper/Pencil Test Day*	PP
04/20/17	Grades 5 and 8 Social Studies Paper/Pencil Test Day*	PP
04/21/17—04/28/17	Grades 5 and 8 Makeup any content area	PP
04/24/17—04/26/17	Grades 3, 4, 6 and 7 materials arrive in schools (alternate delivery date requested)	Both
04/25/17—05/23/17	Grades 3, 4, 6 and 7 Additional Material Order window (closes at noon)	PP
05/01/17—05/26/17	Grades 3, 4, 6 and 7 Online Test Administration Window	OL
05/02/17	Grades 3, 4, 6 and 7 ELA Day 1 Paper/Pencil Test Day*	PP
05/03/17	Grades 3, 4, 6 and 7 ELA Day 2 Paper/Pencil Test Day*	PP
05/03/17	Grades 5, 8 and 11 Return of Materials & Answer Documents Deadline	PP
05/04/17—05/08/17	Grades 3, 4, 6 and 7 ELA Makeup Days	PP
05/09/17	Grades 3, 4, 6 and 7 Mathematics Day 1 Paper/Pencil Test Day*	PP
05/10/17	Grades 3, 4, 6 and 7 Mathematics Day 2 Paper/Pencil Test Day*	PP
05/11/17	Grades 4 and 7 Science Paper/Pencil Test Day	PP
05/12/17—05/19/17	Grades 3, 4, 6 and 7 Makeup any content area	PP
05/24/17	Grades 3, 4, 6 and 7 Return of Materials & Answer Documents Deadline	PP
June 2017	Verification of Enrollment	Both
June 2017	Verification of Answer Documents—watch the Spotlight for details	Both
June 2017	Verification of Not Tested	Both
August 2017	Final Reports	Both

*Absent students can make-up testing on designated make-up dates—see the <u>Spring 2017 Guide to State</u> <u>Assessments</u> (http://www.michigan.gov/documents/mde/Spring_2017_Guide_to_State_Assessments_ jl_536062_7.pdf).





M-STEP Test Administration Manual (TAM)

Office of Standards and Assessment (OSA) Phone: 1-877-560-8378 Website: www.michigan.gov/mstep Email: baa@michigan.gov
Appendix B: Interpretive Guides



Spring 2017 Michigan M-STEP Guide to Reports

Updated November 7, 2017

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Section 1: Introduction

What's in this Guide?

This guide is intended to help educators understand and use the results from the Spring 2017 Michigan Student Test of Educational Progress (M-STEP). Reports available for the M-STEP include student level and aggregate level data reports.

Student level reports provide individual student level performance data. The Student Record Labels, Individual Student Report, Parent Report, Student Roster, and Student Overview reports all provide data at the individual student level.

Aggregate level reports provide performance data based on groups of students—groups by grade, by school, by district, ISD, and state. The aggregate level reports are the Comprehensive Report, Demographic Report, and Expectation Analysis Report. The Target Analysis Report provides aggregate level, assessment target data for ELA and mathematics.

A complete list of available reports is provided on page 4. Detailed descriptions of each report can be found in Section 5 of this guide.

Also included in this guide are the following sections:

- Section 2 provides information on item types and how scores are reported
- Section 3 describes performance level categories and ranges
- Section 4 explains how to access reports
- Section 5 provides detailed descriptions of each report
- Section 6 includes additional resources, both for additional information regarding sources of assessment results as well as general information regarding statewide assessments. Users are encouraged to review these additional resources for further information on statewide assessment reporting

Family Educational Rights and Privacy Act (FERPA)

Reports that provide student level data include federally protected student data. It is imperative that report users understand the sensitive and confidential nature of the data presented on M-STEP reports and comply with all <u>Family Educational Rights and Privacy Act</u> (https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html) regulations.

Invalid Tests

Students who attempted an M-STEP content area test in Spring 2017, but did not receive a valid test score, are reported on the student level reports only. While the test score is not reported, the reason for the invalid test is provided. These students do not count toward accountability, but will negatively impact participation rates. Students who do not receive a valid score are not included on aggregated reports. Tests may be flagged as invalid for the following reasons:

- Student Prohibited Behavior
- Tested in incorrect grade (Out of Level)
- Did not meet "attemptedness" criteria
 - The student did not answer enough questions to calculate an overall scale score
- Non-standard accommodation administered
- Other misadministrations
 - Student not given correct test
 - Student not provided appropriate designated support or accommodation
 - Paper/Pencil test materials not returned according to schedule
 - See M-STEP Test Administration Manual for additional examples



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Report Descriptions

Report	Description	Aggregation	Distribution
Student Record Labels	Summarizes individual student achievement in each content area for inclusion in the student's Cumulative Student Record folder.	• Individual Student	• Paper
Individual Student Report (ISR)	Separated by content area, the ISR provides detailed information on individual student achievement, including overall scale score, performance level, student growth percentile, and summarized claim or discipline data.	• Individual Student	• Online
Parent Report	Summarizes individual student achievement in each content area, including overall scale score, performance level, and summarized claim or discipline data.	• Individual Student	PaperOnline
Student Roster	Separated by content area, the roster provides detailed information on student achievement, for groups of students, including overall scale score, performance level, and summarized claim or discipline data.	• Individual Student	• Online
Student Overview	Summarizes student achievement for all content areas, including scale score, performance level information, and student growth percentile.	• Individual Student	• Online
Expectation Analysis Report	Provides the percentage of points earned by grade and content area expectation in each discipline and the number of students scoring in each of four quartiles. This report is available for Science and Social Studies only and is intended to provide an overview of performance by content expectation.	SchoolDistrictState	• Online
Demographic Report	Provides a comparison of students by grade and content, aggregated across selected demographic groups, showing mean scale scores and percentages of students in each performance level.	SchoolDistrictISDState	• Online
Comprehensive Report	Provides a comparison of students by grade and content by schools within a district or districts within an ISD. Mean scale scores and percentages of students in each performance level are reported.	DistrictISD	• Online
Target Analysis Report	For groups of students, identifies assessment targets that are relative strengths or weaknesses as compared to overall performance on an ELA or Mathematics assessment.	SchoolDistrictISDState	• Online

Section 2: Scoring

Scoring by Item Type

All of the processes employed to assess overall student performance begin at the item level. There are three types of items on the M-STEP: Multiple Choice (MC) items, Constructed Response (CR) items, and Technology Enhanced (TE) items. Item scores are used in the statistical models and transformations that result in scale scores.

Multiple Choice Item Scores

In Spring 2017, all content area assessments - ELA, mathematics, science, and social studies - included multiple choice items. When responding to multiple choice items, students select from the available options, only one of which is a correct response to the item. Students who select only the correct option receive a score of one (1) on the MC item. Students who select one of the incorrect options, multiple options, or did not respond receive a score of zero (0). The string of responses from the MC items (e.g. 1,0,0,0,1,...,1) serves as input for the statistical models used to derive scale scores. MC items are scanned and scored by computer.

Constructed Response Item Scores

In Spring 2017, the ELA and Math tests included operational Constructed Response (CR) items. ELA Grades 3, 4, 6, and 7 contained 2-point Claim 2 (writing) items in the CAT. ELA Grades 5 and 8 contained 2-point Claim 4 (research) items and a 6-point Written Extended Response (WER) Claim 2 (writing) item in the Performance Task (described below).The modes for the WER items were narrative, explanatory/informational, and opinion/argumentative. In mathematics, the maximum points for CR items ranged from one (1) to three (3) points.

CR items requiring typed or written answers are evaluated by human scorers. Guided by precise criteria, scorers review a response for

accuracy and completeness and assign points based on how well the requirements of the prompt are fulfilled according to a scoring rubric for the specific item. Extensive professional practice and research have refined and validated the critical steps that ensure consistency in scoring. Scorers are trained to ignore extraneous factors such as neatness and to focus on the comprehension demonstrated in the response.

Automated Scoring (AI) is also used for a portion of MDE selected items in both ELA and Mathematics. The first year an item is AI scored, it receives a 20% read-behind—meaning a human scorer also reads and scores the item—and the correlation between these two scores is examined to ensure accuracy of AI scoring. In subsequent years, AI scored items receive a 10% read-behind. Due to the high-stakes nature of these large-scale assessments, the MDE has taken every step possible to minimize scoring subjectivity, and maximize scoring objectivity.

Technology Enhanced Item Scores

Technology Enhanced (TE) items are computer-delivered test questions which include specialized interactions that allow students to respond to tasks that go beyond what can be covered in traditional MC and CR items. TE items require students to produce information, as opposed to simply selecting a choice from answer options. The scoring for most TE items is automated similar to MC items, eliminating the need for human scorers in the majority of cases. TE item types include the following:

Drag and Drop—students can drag pictures or words into boxes or "drop zones" to indicate an answer.

Choice Interaction—similar to a multiple-choice items, but the item can have more than four options, and any number of the options can be correct or incorrect.



Hotspot (Count or Selection)—graphics are selectable; for Count, students can choose a particular number of hotspots to show their answer; for Selection, students select a specific hotspot to choose their answer.

Matching Interaction—an interaction grid that allows the students to select areas of matching between an option in the row with an option in the column.

Keypad Input—a math item type that contains an embedded keyboard for math functions that can be used to answer the question.

Evidence Based Selected Response—an item consisting of two parts. Each part is multiple choice or hot text paragraph with answers embedded in the paragraph.

Hot Text Highlight (Line and Paragraph)—text is selectable, and once selected, will highlight for the students; for Line, the students can select one or more lines of text to answer the question; Hot text paragraph involves answers embedded within a paragraph(s). Students select word(s), phrase(s), sentence(s), and/or paragraph(s) according to the instructions in the stem or question.

Order—a list of items or sentences that can be arranged by the students in the correct order.

Performance Tasks

Performance tasks are extended activities that measure knowledge and skills across multiple standards using real-world tasks. The performance tasks require students to demonstrate analytical, organizational, and research skills to complete the tasks. The students are provided with a stimulus or source material that is linked to a set of test items.

Students in all grades, 3-8, receive a performance task in mathematics. In ELA, only students in grades 5 and 8 are assessed with a

performance task. Each math performance task set contains 5-6 test items, and ELA performance tasks contain 3-4 test items. The students must interact with the stimulus or source material in order to answer the items in the set. Item types for ELA in the performance tasks include CR (including the 6-point Writing Extended Response items), and TE items. Math performance tasks include CR and TE items.

For math, some of the test items in the performance tasks have dependency to each other, meaning that the answer a student provides for one test question would affect the correct response needed for an associated test question.

Differences between Online and Paper/Pencil Items

The MC and CR items appear the same in both the online testing environment and the paper/pencil print forms. Due to the computer interactions involved in the TE items, the paper/pencil print forms feature variations of the TE items called companion items that test the same concepts and skills as the corresponding TE items. The variations are modified for use in a print form.

The print variations of the TE items are created in various ways. In some cases, gridded response boxes are used to allow students to synthesize an answer while still allowing for automated scoring. In other cases, students are asked to write short answers in their answer documents. Some TE items are converted to multiple-select items (similar to Choice Interaction but with more than four options and possibly more than one correct answer) or table interactions (where the students fill in portions of a table to complete the question). In all cases the companion items maintain the same point values as their TE counterparts.

How Scores are Reported

Scale Scores

Students receive an overall scale score in each content area for which a valid test was returned. Scale scores are the basic unit of reporting. A scaled score is calculated from a total number of obtained score points that is statistically adjusted and converted into a consistent, standardized scale that permits direct and fair comparisons of scores from different forms of a test either within the same administration year or across years (Tan & Michel, 2011). Established psychometric procedures are used to ensure that a given scale score represents the same level of performance regardless of the test form. Scale scores are especially suitable for comparing the performance of different groups of students in the same grade from year to year and for maintaining the same performance standard across the years. While scale scores are comparable across tests in a given content area within the same grade, they are not comparable across content areas or grades. Each overall scale score is indicated by a single number. An error band is noted for each scale score. The error band indicates the range of scores that the student would be likely to achieve if he or she were to take the test multiple times.¹

Assessment Claims

Claims are broad statements about what students should know and be able to do in ELA and mathematics. Claim performance indicators show student performance within each claim. The Claim performance graph provides a visual representation of student performance relative to the range of possible performance within each claim.

- \bigtriangleup The blue bar and upward facing triangle indicates the student is making adequate progress
- O The yellow bar and circle indicates attention may be indicated
- The orange bar and downward facing triangle indicates the student is most at risk of falling behind at risk of falling behind

A complete test is required in order to calculate the claim performance indicators. If an online test was automatically force-completed, that is the test was in-progress when the test window closed, no claim score or claim performance indicator or graph is reported.

Claim Performance Indicator Clarification

It is possible for a student who scored at the "Advanced" proficiency level to also receive a claim indicator that states "Attention may be indicated" in one or more of the claims in the content area.

This occurs because the claim performance indicator scoring is based on a different scoring scale:

- Claim performance indicators show student performance within a single claim
- Overall proficiency levels show student performance within the entire content area.

Claim performance indicators are reported in three categories versus four proficiency levels reported for overall content. The claim performance indicators are based on items within the claims - resulting in fewer items per claim than the overall content area proficiency level. With fewer items in each claim, claims cannot be reported with the same level of specificity as a performance level. Claim performance indicator graphs are included in the 2017 reports to provide a visual representation of student performance relative to the range of possible performance within each claim. Claim performance indicators differ by claim within content area and are not comparable across content areas or grades.

When a student has a claim performance indicator of "Attention may be indicated", schools should use local assessment data to build a better understanding of the student's mastery of the content within the claim. This use of local data will assist teachers and school staff with gaining a deeper understanding of what the student knows and is able to do in relation to Michigan's Academic Standards.

¹ The Connecticut Smarter Balanced Assessments Interpretive Guide



Student Growth Percentiles

Student Growth Percentiles (SGPs) will appear on the Individual Student Report, Student Overview, and in the school data files accessed through the Secure Site.

Student growth percentiles represent one powerful way to understand growth. Values for SGPs in Michigan range from 1-99, and can be interpreted in similar ways to other forms of percentiles. Scores close to 50 represent average growth. Higher SGPs indicate higher growth, while lower SGPs indicate lower growth. These percentiles are relative to students in Michigan, who had comparable achievement scores on prior state-level tests. Because of this, only students who received valid scores on the most recent state assessment in a content area and have a valid score on this year's test will receive SGPs. It also follows that SGPs will not be available for students who take M-STEP tests in fourth grade science, fifth grade social studies, and third grade ELA or mathematics.

The addition of SGPs to Individual Student Reports, Student Overview Reports, and data files can add important context to understand the growth of individual students and growth patterns within groupings of students. When combined with achievement scores and proficiency categories, SGPs can help educators understand how student achievement scores compare to their peers in the state who had comparable prior test scores. SGPs will be added to reports after the initial release of reports due to the additional time required to calculate. Visit the MDE Accountability website for more information about <u>Student Growth Percentiles</u> (http://www.michigan.gov/mde/0,4615,7-140-22709_59490-298094--,00.html).

Note: In Spring 2017, grade 7 Science reports, and grade 8 and 11 Social Studies reports do not include SGPs because they do not have a prior state assessment score:

 7th grade Science: students did not take the grade 4 M-STEP Science test. When the Science test was moved from 5th grade MEAP to 4th grade M-STEP, these students were in the cohort of students who were in 4th grade for the final year of the 5th grade Science test and in 5th grade for the first year of the 4th grade Science test.

- 8th grade Social Studies: students did not take the grade 5 M-STEP Social Studies test. When the Social Studies test was moved from 6th grade MEAP to 5th grade M-STEP, these students were in the cohort of students who were in 5th grade for the final year of the 6th grade Social Studies test and in 6th grade for the first year of the 5th grade Social Studies test.
- 11th grade Social Studies: When the Social Studies test moved from the fall of 9th grade to spring in 8th grade, these students were the cohort of students who did not take any Social Studies test. They were 8th graders in the final year of the 9th grade Social Studies test and 9th graders in the first year of the 8th grade Social Studies test.

Performance Levels

M-STEP scale scores within each subject area can be described in ranges. The labels applied to these ranges are known as Performance Levels. The M-STEP performance levels are: Not Proficient, Partially Proficient, Proficient, and Advanced. The divisions between the levels are often referred to as cut scores. Scale score and performance level range tables are located on the following pages.

The cut scores are typically recommended by a panel comprised of educators and other stakeholders throughout the state in a process known as standard setting. To set these standards, the panel uses detailed descriptions of what students in each of the performance levels should know and be able to do. Based upon these detailed descriptions and actual assessment items, the panel recommends the score that best separates each performance level from the next to the Michigan Superintendent of Public Instruction. The State Superintendent then recommends the results of the standard setting (or modifications of these standards) to the Michigan State Board of Education (SBE). The SBE is the authority who approves the final cut scores and performance level ranges. While the performance level descriptors necessarily differ by grade and subject area, student achievement, as defined by the obtained performance level, can be reasonably compared across subjects within a grade. Such a comparison can be used to indicate whether students are meeting Michigan content standards in each subject and grade.

Section 3: Performance Level Descriptors and Ranges for Grades 3-8

Performance Level (PL) Descriptors

Advanced: The student's performance exceeds grade level content standards and indicates substantial understanding and application of key concepts defined for Michigan students. The student needs support to continue to excel.

Proficient: The student's performance indicates understanding and application of key grade level content standards defined for Michigan students. The student needs continued support to maintain and improve proficiency.

Partially Proficient: The student needs assistance to improve achievement. The student's performance is not yet proficient, indicating a partial understanding and application of the grade level content standards defined for Michigan students.

Not Proficient: The student needs intensive intervention and support to improve achievement. The student's performance is not yet proficient and indicates minimal understanding and application of the grade level content standards defined for Michigan students.

Michigan Student Test of Educational Progress		2017 M-STEP Performance Level Scale Score Ranges						
Subject	Grade	irade Level 1 Not Level 2 Proficient Prof		Level 3 Proficient	Level 4 Advanced			
	3	1203-1279	1280-1299	1300-1316	1317-1357			
	4	1301-1382	1383-1399 1400-1416		1417-1454			
EL A	5	1409-1480	1481-1499	1500-1523	1524-1560			
ELA	6	1508-1577	1578-1599	1600-1623	1624-1655			
	7	1618-1678	1679-1699	1700-1725	1726-1753			
	8	1721-1776	1777-1799	1800-1827	1828-1857			



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Michigan S	tudent Test d	of Educati	ional Pro	gress

2017 M-STEP Performance Level Scale Score Ranges

Subject	Grade	Level 1 Not Proficient	Level 2 Partially Proficient	Level 3 Proficient	Level 4 Advanced	
	3	1217-1280	1281-1299	1300-1320	1321-1361	
	4	1310-1375	1376-1399	1400-1419	1420-1455	
Mathematics	5	1409-1477	1478-1499	1500-1514	1515-1550	
	6	1518-1578 1579-1599		1600-1613	1614-1650	
	7	1621-1678	1679-1699	1700-1715	1716-1752	
	8	1725-1779	1780-1799	1800-1814	1815-1850	
	4	1280-1373	1374-1399	1400-1409	1410-1442	
Science	7	1592-1680	1681-1699	1700-1716	1717-1757	
	11	2008-2078	2079-2099	2100-2119	2120-2161	
	5	1395-1457	1458-1499	1500-1529	1530-1568	
Social Studies	8	1703-1770	1771-1799	1800-1830	1831-1868	
	11	2016-2068	2069-2099	2100-2130	2131-2166	

Section 4: The Dynamic Score Reporting System

M-STEP reports are available to school and district users through the Dynamic Score Reporting Site which is accessible through the Secure Site. Detailed directions for accessing the M-STEP reports are documented in the **How to Access and Navigate Michigan's Dynamic Score Reporting Site** document which is located on the M-STEP web page (www.michigan.gov/mstep).

The Secure Site

Security	Assessment Registration	Student Assessments Reports Accountability Review Requests	
Secure	e Site		
			Page Instru
Check the He	ome page often for upda	ted information and announcements.	r age man
Check the Ho Search Filt	ome page often for upda er	ted information and announcements.	r age mout
Check the He Search Filte	lome page often for upda t er e <i>quired field</i>	ted information and announcements.	

M-STEP reports are available through the <u>Secure Site</u> (https://baa.state.mi.us/BAASecure). Secure Site access is only available to district and school employees with authorized user roles and permissions granted by their district. You must have a MEIS login in order to access the Secure Site. For instructions on how to obtain a MEIS login, go to <u>Secure Site Training</u> (www.michigan.gov/mde/0,4615,7-140-22709_57003---,00.html) and click "How do I get access to the Secure Site?"



Functionality

Michigan's Dynamic Score Reporting Site provides data for a variety of reports. Regardless of the selected report, users will encounter the following components:

1. **Welcome Page:** Provides detailed directions for accessing the reports based on user role.

Welcome to Michigan's Dynamic Score Reporting Site!

To access your reports:

- a) Select a report from the Report dropdown menu above.
 (Note: The page will refresh with available filters in the left margin.)
- b) District users may need to select the desired school to display the report.
- c) Select from the filters on the left margin.
- d) Select the blue Generate Reports button to generate and open the requested report. (Note: your filter selections will remain in place until you select different filter options.)
- 2. **Go to Student Quick Link:** Allows user to jump to a student selected in the Filter Pane.

Student: Go to Student •

- 3. **The Actions button menu:** These options vary depending on the report.
- Actions: Choose an Action

Options in this menu include:

- About this Report
- PDF Download use this to view individual or small groups of reports

- Zip (Bulk PDF) Download use this to print a large group of reports
- CSV File Download downloadable file that contains all student

data that is contained in the report

- CSV File Format file format that describes the data contained in the CSV file download
- 4. **Report Body:** Contains the selected report with the results of the filtered input.



2017 M-STEP Guide to Reports

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Filter Pane: This section allows the user to filter by grade, content area, reporting code, and individual students. This pane also allows the user to generate reports. The Student filter has a predictive search feature. Users type student name(s) into the search bar to filter. The options available in the Filter Pane vary depending on the report. Filter options may include:

- Student Population
- Grade
- Content
- Reporting Code
- Performance Level
- Additional Reporting Groups Accordion:
 - Gender
 - Ethnicity
 - Economically Disadvantaged
 - English Learner
 - Former English Learner
 - Homeless
 - Migrant
 - Students with Disabilities
 - Homeschooled
- Students

		Additional Reporting Groups
		Gender - All
		Female
		Male
		Ethnicity - All
		American Indian or Alaska Nativ
		Asian
Grade - 1 selected	- 1	Black or African American
V 03		Hispanic or Latino
04		Islander
05		Two or More Paces
06		White
07		
08		Economically Disadvantaged -
Content Area - All	-	No
English Language Arts		Yes
Mathematics		
mailonidaos		English Learner - All
Reporting Code - All	-	No
All	-	Yes
	·	Eormer English Learner - All
Performance Level - All	-	
Advanced		Homeless - All
Proficient		
Partially Proficient		Migrant - All
Not Proficient		
Additional Reporting Groups		Students with Disabilities - All
Homeschooled - 1 selected	-	Homeschooled - 1 selected
V No		✓ No
Yes		Yes
type here to filter student list		type here to filter student list
Students - All	- 1	Students - All
DOE, JANE A		DOE, JANE A
DOE, JOHN A	Ξ	DOE, JOHN A
DOE, JANE B		DOE, JANE B
DOE, JOHN B		DOE, JOHN B

A// -

What's New!

New features have been added to the Dynamic Score Reports for 2017:

Drill Down: Users can drill-down from the School Demographic Report to open a Student Roster report which includes students from the selected group, and from the Student Roster to the Individual Student Report for the selected student. The Drill Down feature is discussed in more detail in the Demographic and Student Roster Report descriptions.

Actions Button: The Actions Button is a drop-down menu that includes all of the options for each report. The options appear after a report is generated, and are based on the selected report. See each report section for information about which options are available for each report.

Cover Page: Individual-level student reports now include a cover page. The cover page includes entity information, a list of filters that were applied when the reports were printed, the total number of pages, and the date and time the report was generated. Each page also includes page numbers

New Filters: Many new filters are available in the 2017 reports. See each report section for the filters available in each report.

CSV Files: CSV files are available for the aggregate reports and the Student Roster Report. They are found under the Actions Button on each report. More information is available about the CSV files in the report sections, and in the CSV File section of this document.



Student Level Data Reports

Student Record Labels

The Student Record Labels (right) provide summary student performance levels for individual students. The labels include district and school information, student demographic information, M-STEP administration cycle information, and overall student performance level for tested content areas.

Student Record Labels are provided for inclusion in the students' Cumulative Student Record or CA-60 folder. They are printed and shipped to the school where the student tested in late summer and are available through the Secure Site if schools need to print additional copies.

00000 ABC SCHOOL DISTRICT 00000 ABC ELEMENTARY-MIDDLE SCHOOL

DOE, JOHN A

UIC#: 000000000, STU# 000000

DOB: 00/00/0000

Gender: M

Grade: 4 Spring 2017



	Content	SS	Performance Level
	ELA	1360	1-Not Proficient
	Mathematics	1408	3-Proficient
	Science	1396	2-Partially Proficient
м	Social Studies		
-			

Individual Student Report

The Individual Student Report (ISR) (right) provides information about student performance by content area. Each student will have a separate ISR for each content assessed. The report is divided into three main sections:



Student demographic information



Overall content performance

Detailed claim data for English language arts (ELA) and mathematics and discipline and content expectation data for science and social studies.

Student Demographic Information

This section provides identifying information about the student including name, grade, gender, date of birth, race/ ethnicity, Unique Identification Code (UIC), and, if provided by the school, the district student ID. The report will indicate if the student has been identified as a Student with Disability, English learner, or formerly limited English proficiency in the

Michigan Student Data System (MSDS). Additionally, any designated supports or accommodations the student received are displayed.

Overall Content Performance

Overall content area Scale Scores, including margin of error and the associated performance level, are provided as a graphic and as a table. Ranges for each performance level are also shown on the graphic. Student Growth Percentile in grades 4-8 ELA and mathematics, grade 7 science, and grade 8 social studies will be populated on the reports later in the fall.

Individual Student Report

Year: 2017 | Assessment: M-STEP | ISD Code: 00000 | ISI District Name: ABC School District | School Code: 00000 | DOE, JANE A | Grade 07 | English Language Arts C ISD Name | District Code: 00000 | ne: ABC Middle School | Reporting Code: 0000

UIC: 000000000 Student ID: 00000000 Gender: F DOB: 00/00/0000 Ethnicity: Asian Student with Disability: Y | English Learner: N Former English Learner: N Designated Supports: Contrasting Text Accommodations: None

English Language Arts Overall Performance Level and Scale Score



Claims and Disciplines

Claim performance indicators for English language arts and mathematics are reported. Performance indicators show student performance within each claim. The Claim Performance graph provides a visual representation of performance relative to the range of possible performance within each claim.

The blue bar and upward facing triangle indicates the student is making **adequate progress**

- O The yellow bar and circle indicates **attention** may be indicated
- The orange bar and downward facing triangle indicates the student is most **at risk** of falling behind



To help understand assessment claims and targets, MDE has produced ELA and mathematics crosswalks for each grade. Educators can use the crosswalks to see the alignment between claims, targets, and content standards. The crosswalks can be found at www.michigan.gov/mstep.

Science and social studies content standards are organized by disciplines. Raw scores, that is points earned out of total points possible, are reported for each discipline. Raw scores are not comparable across test forms.

Functionality

Filters

Users may choose from several filters prior to report generation:

- Grade
- Content Area
- Reporting Code
- Performance Level
- Student Population
 - All Students this is the default
 - Students with Disabilities students who are marked Special Education in the Michigan Student Data System (MSDS) at the time of testing
 - All Except Students with Disabilities students who are not marked Special Education in MSDS at the time of testing

- Additional Reporting Groups:
 - Gender
 - Ethnicity
- Economically Disadvantaged
- English Learner
- Former English Learner
- Homeless
- Migrant
- Students with Disabilities
- Homeschooled
- Students

The Student filter has a predictive search filter. Users can type student names. The results are narrowed as additional characters are typed into the search box.

Actions

The Actions button appears after a report is generated, and contains the following options for the Individual Student Report:

- About this Report
- PDF Download To view a PDF of the Individual Student Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print individual or small groups of reports from this option.
- Zip (Bulk PDF) Download To print an entire large group of reports, select "Zip (Bulk PDF) Download". This selection will open a zip file that will allow you to download all reports and print all reports for large groups of students.

Parent Report

Parent Reports (right) are printed and shipped to schools for distribution to parents.

The Parent Report provides information for parents about student performance in tested content areas. This report includes four main sections:



Superintendent Letter

Overall Performance Level and Scale Score



Detailed claim data for English language arts (ELA) and mathematics, and discipline data for science and social studies.



Definitions for Parents

Performance Level Descriptors

Superintendent Letter

The Superintendent Letter to parents describes the M-STEP test administration, provides a brief overview

of the data contained in the report, and provides a list of resources for the parent or quardian.

Claim and Discipline/Content Expectation Data

Claim performance indicators for English language arts and mathematics are reported. Claim Performance Indicators show student performance within each claim. The Claim Performance graph shows a visual representation of student performance relative to the range of possible performance within each claim.



making adequate progress

- \bigcirc The yellow bar and circle indicates attention may be indicated
 - The orange bar and downward facing triangle indicates the student is most at risk of falling behind

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In rare instances, a student may take a sufficient portion of the test to generate an overall scale score, but not complete the test sufficiently to fully evaluate claim-level performance. In these instances, the claim performance indicators are reported with an asterisk to indicate "Insufficient Data to Report".



Science and social studies content standards are organized by disciplines. Raw scores, that is points earned out of total points possible, are reported for each discipline. Raw scores are not comparable across test forms.

Definitions

The following definitions are provided:

Claims—Claims are used as a means to organize assessment targets. Claims apply to English language arts and mathematics. Within the claims, assessment targets are used to organize the standards. A claim score reflects a student's performance on test items within that claim.

Claim Performance Indicators—Claim Performance Indicator and Graphs Claim performance for individual ELA and mathematics claims are indicated by a symbol. A blue triangle pointing up indicates the student is making adequate progress on a claim. A yellow circle indicates attention may be indicated for a student to continue meeting the claim. An orange triangle pointing down indicates the student is most at risk of falling behind on a claim. The graph provides a visual representation of student performance relative to the range of possible performance within each claim.

Disciplines—Disciplines are used as a means to organize content standards and expectations. Disciplines apply to science and social studies. A discipline score reflects a student's performance on the test items within the discipline.

Margin of Error—Educational measurements are attempts to capture a student's true score, or ability, in the area being assessed. The margin of error around the student score is an estimate of the range or scores one would expect if the same student was to be measured repeatedly with parallel assessments.



Functionality Filters

Users may choose from several filters prior to report generation:

- Grade
- Homeschooled
- Students

The Student filter has a predictive search filter. Users can type student names or three characters to filter the student list.

Actions

The Actions button appears after a report is generated, and contains the following options for the Parent Report:

- About this Report
- PDF Download To view a PDF of the Parent Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print individual or small groups of reports from this option.
- Zip (Bulk PDF) Download To print all of a large group of reports, select "Zip (Bulk PDF) Download". This selection will open a zip file that will allow you to download all reports and print all reports for large groups of students.

V - Most at risk of falling behind O - Attention may be indicated		▼ - Most at risk of falling behind O - Attention may be indicated				米 - Insufficient Dat	a to Report	Gray - I	margin of er	ror	
	Sortable				Overall	Scale Score	All clai	ms ar	e sort	able.	as south 9
Students 🛦		Scale Score	Margin of	Perf.	1621-1678 1679-1699 Not Proficient Partially Profi	1700-1715 cient Proficient	1716-1752 Advanced	a di seconda	is & Proce plet	Solvings ounics	ungt
(Total = 873)			Error	Level	(NP) (PP)	(P)	(A)	conce	Phode	comm	
DOE, JANE A	0	1737	(±6)	А				\triangle	\triangle	\triangle	
DOE, JOHN A	0	1752	(±12)	А				\triangle	\triangle	\triangle	
DOE, JANE B	0	1726	(±4)	А			I	\triangle	\triangle	\triangle	
DOE, JOHN B	0	1700	(±6)	Ρ				\bigtriangledown	\triangle	\triangle	
DOE, JANE C	0	1679	(±7)	PP		;		\bigtriangledown	\bigcirc	\triangle	
DOE, JOHN C	0				Invalid Test - Nonst	andard Accommod	lation				
DOE, JANE D	0	1700	(±6)	Р				∇	\wedge	\wedge	





Student Roster

Student Roster (below) allows users to view student scale scores and Claim Performance data for English language arts and mathematics or discipline date for science and social studies by content area and grade.

The report is divided into four main sections:

- 1. An alphabetical listing of the selected students
- 2. Overall content performance in a table format
- 3. Overall content performance in a graphical format
- 4. Claim, for ELA and mathematics, or discipline, for science and social studies, data

Selected Students

Students who met the selected filter criteria are displayed in ascending alphabetical order by last name, then first name. The sort sequence may be changed to sort in descending alphabetical order. The following data is displayed in this section:

- 1. Number of students displayed in the student roster. This represents all students who met the selected filter criteria including students with invalid tests.
- 2. Student Name as last name, first name, middle initial. Student name is sortable.
- 3. Unique Identification Code (UIC) is displayed when clicking the Information or (1) icon
- 4. Date of Birth (DOB) is displayed when clicking the Information or i icon

Overall Content Performance (Table Format)

For each selected student the following is displayed:

1. Scale Score. The scale score is sortable. Sorting by scale score

will result in a list of the selected students in order of scale score (ascending or descending—selecting "Scale Score" once sorts in ascending order, selecting twice sorts in descending order).

2. Margin of Error

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- 3. Performance Level:
 - a. A = Advanced
 - b. P = Proficient
 - c. PP = Partially Proficient
 - d. NP = Not Proficient

Overall Content Performance (Graphical Format)

The performance data for each selected student is also displayed in a graphical format. In addition, the ranges for the four performance levels are provided in the legend.

Claim Performance Indicators and Discipline Points Possible/Points Earned

Claim performance indicators are displayed for English language arts and mathematics. For science and social studies, points possible/ points earned raw score data is displayed. Each claim and discipline is sortable.

Claim performance indicators show student performance within each claim.

- blue upward facing triangle indicates the student is making adequate progress
- yellow circle indicates attention may be indicated

orange downward facing triangle indicates the student is most at risk of falling behind

In mathematics, Claim 2 (Problem Solving) and Claim 4 (Modeling and Data Analysis) are combined for reporting purposes because of content similarity. There are still four claims, but only three claim scores will be reported with the overall math score.

In rare instances, a student's ELA and/or mathematics claims may contain an asterisk. This would occur if a student took a portion of the test sufficient to report an overall scale score, but did not complete a sufficient number of items to fully evaluate the claim-level detail.

Functionality

Filters

- Grade
- Content Area
- Reporting Code
- Performance Level
- Additional Reporting Groups
- Gender
- Ethnicity
- Economically Disadvantaged
- English Learner
- Homeless
- Migrant
- Students with Disabilities
- Students

Actions

The Actions button appears after a report is generated, and contains the following options for the Student Roster Report:

- About this Report
- PDF Download To view a PDF of the Student Roster Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print individual or small groups of reports from this option.

- CSV File Download downloadable file that contains all student data that is contained on the report.
- CSV File Format file format that describes the data contained in the CSV file download.

Drill Down Feature

The Student Roster Report includes a drill-down feature that enables the user to select the student name on the Student Roster Report to open an Individual Student Report.

After a user has selected a student name to drill down into the Individual Student Report and the Individual Student Report displays, a breadcrumb area appears below the ISD/District/School entity information that displays 'Student Roster Report – Individual Student Report'. Each report name in the breadcrumb is an active link. To return to the Student Roster Report, the user selects 'Student Roster Report'.

A user may drill-down into a Student Roster Report from the School Demographic Report. When a user accesses the Student Roster Report in this way, the user cannot make any additional filter selections in the report. The user can view the report and use its sorting functionality or drill-down further into an Individual Student Report. However, to use the filter options in the Student Roster Report, the user must select the Student Roster Report from the report drop-down menu.



Student Overview

The Student Overview (below) provides summary information about student performance in all tested content in the selected grade. For each selected student the following data is displayed for each tested content in both graphical and table format:



Actions

The Actions button appears after a report is generated, and contains the following options for the Individual Student Report:

- About this Report
- PDF Download To view a PDF of the Individual Student Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print individual or small groups of reports from this option.
- Zip (Bulk PDF) Download To print an entire large group of reports, select "Zip (Bulk PDF) Download". This selection will open a zip file that will allow you to download all reports and print all reports for large groups of students.

Aggregate Data Reports

Target Analysis Report

The Michigan Student Test of Educational Progress (M-STEP) Target Analysis report provides information about relative strengths and relative weaknesses by assessment target in English language arts and mathematics. The Target Analysis Report is available at the school, district, ISD, and state levels. The report is intended to provide an overview of relative strengths and weaknesses in English language arts and mathematics by assessment target as compared to student performance on the test as a whole.

The population of students to be displayed may be selected by the user. Users may select from the following student populations:

- All Students this is the default
- All Except Students with Disabilities students who are not marked Special Education in the Michigan Student Data System (MSDS) at the time of testing
- Students with Disabilities students who are marked Special Education in MSDS at the time of testing

The report displays the Number of Students Assessed with valid scores in the selected entity (not all students were assessed on every assessment target or received the same number of items on each target), and the relative performance on the assessment target as compared to the test as a whole.

School Target Analysis Report Year: 2017 Assessment: M-STEP ISD Cote: 00000 ISD Name: BC ISD Name District Code: 00000 District Name: ABC School District Name: ABC School District							
Grade 08 English Language Arts All Students							
Relative Strength Neither Strength nor Weakness Relative Weakness	nsufficient Data to Report						
Note: This report compares assessment target performance to overall test performance within the school. The report identifies relative areas of strength and weaknesses among the identified aggregate group; it is not a proficiency report.							
Number of Students Assessed 685							
	1]						
Claim 1: Reading							
Target 1: Given an inference/conclusion, use details and information from a literary text.	\bigtriangledown						
Target 2: Summarize central ideas/key events of a literary text using key details from the text.	*						
Target 3: Determine word meaning based on context, relationships, structure, or use of resources.	\land						
Target 4: Make an inference/provide a conclusion of a literary text.	\bigtriangledown						
Target 5: Analyze relationships among literary elements within or across literary texts.	*						
Target 6: Analyze literary text structures, features, or formats and their impact on meaning or presentation.	\bigtriangledown						
Target 7: Interpret fig. language/literary devices/connotative meaning and their impact on meaning or tone.	*						



How to Read this Report

This report is an aggregate report that shows relative strengths and weaknesses on each target as compared to performance on the test as a whole. The first row identifies the Number of Students Assessed with valid overall and claim level scores for the identified aggregate group. The second row identifies Claim 1 for the content area – either English language arts or mathematics. This row is gray and the text is centered. The first column of the next row lists the assessment targets for that claim. The second column contains information about the aggregate group's performance on the assessment target as compared to the test as a whole.

Each assessment target contains a symbol that indicates the relative performance of the aggregate group as compared to the test as a whole:

- A circle indicates neither a strength nor a weakness in the assessment target as compared to the aggregate group's performance on the test as a whole.
- A downward pointing orange triangle indicates a relative weakness in the assessment target as compared to the aggregate group's performance on the test as a whole.
- * An asterisk indicates there is insufficient data to report on the relative performance in the assessment target as compared to the aggregate group's performance on the test as a whole. Data is reported for assessment targets only when the aggregate group includes at least:
 - 15 unique students per target
 - 3 unique items per target
 - 25 responses per target

Functionality

Filters

- Student Population
- Grade
- Content Area

Actions

The Actions button appears after a report is generated, and contains the following options for the Student Roster Report:

- About this Report
- PDF Download To view a PDF of the Student Roster Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print individual or small groups of reports from this option.
- CSV File Download downloadable file that contains all student data that is contained on the report.
- CSV File Format file format that describes the data contained in the CSV file download.

Expectation Analysis

Expectation Analysis (below) provides the percentage of points earned by grade and content area expectations in each discipline (science and social studies) and the number of students scoring in each of four quartiles. The report is intended to provide an overview of performance by content expectation.

The report displays the Number of Students Assessed in the expectation (not all students were assessed on every expectation), the average percentage of points earned, and the number of students scoring in one of four bands or quartiles: 0-25%, 26-50%, 51-75%, and 76-100% points earned out of points possible.

Functionality

Filters

- Student Population
- Grade
- Content Area
- Reporting Code

Actions

The Actions button appears after a report is generated, and contains the following options for the Student Roster Report:

- About this Report
- PDF Download To view a PDF of the Student Roster Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area. You can print

individual or small groups of reports from this option.

- CSV File Download downloadable file that contains all student data that is contained on the report.
- CSV File Format- file format that describes the data contained in the CSV file download.

State Expectation Analysis Report

Year: 2017 | Assessment: M-STEP

Grade 11 | Social Studies | All Students

			0	Number of Students With:			
Expectations	U.S. History and Geography	Assessed per Expectation	% Points Earned	0-25% Points Earned	26-50% Points Earned	51-75% Points Earned	76-100% Points Earned
U6.1.01	Analyze factors: United States major industrial power	566	72.4	156	0	0	410
U6.1.03	Analyze the changing urban and rural landscape	566	68.6	178	0	0	388
U6.2.02	Explain causes: WWI; America's role in the war	607	72.5	167	0	0	440
U6.2.03	Analyze impact WWI: US government/economy/civil liberties	566	66.1	192	0	0	374
U6.2.04	Explain Wilson's Fourteen Points/geopolitical tension	41	41.5	24	0	0	17
U7.1.02	Evaluate causes/consequences of Great Depression	607	59.8	244	0	0	363
U7.2.01	Analyze factors contributing to World War II	607	64.6	215	0	0	392
U7.2.02	Evaluate US role in fighting WWII	347	8.1	319	0	0	28
U7.2.03	Analyze changes in American life: US in WWII	301	71.1	87	0	0	214
U7.2.04	Investigate development: Hitler's "final solution"	41	0.0	41	0	0	0
U8.1.01	Analyze factors that contributed to the Cold War	566	83.4	94	0	0	472
U8.1.02	Evaluate American policy: "containing" Soviet Union	566	32.5	382	0	0	184



Demographic Report

The Demographic Report (below) provides a comparison of students by grade and content, aggregated across selected demographic groups, showing the percentages proficient at each level (Advanced, Proficient, Partially Proficient, and Not Proficient). The Demographic Report is available at the School, District, ISD, and State levels.

The population of students to be displayed may be selected by the user. Users may select from the following student populations:

All Students—this is the default

All Except Students with Disabilities—students who are not marked Special Education in the Michigan Student Data System (MSDS) at the time of testing

Students with Disabilities—students who are marked Special Education in MSDS at the time of testing

After the user selects a grade to view, all selected content for that

grade is displayed sequentially in alphabetical order. The report is divided into three main sections:



Overall performance level percentages for the selected student population in the grade and content displayed in graphical format.



Demographic subgroup performance level data for each subgroup in table format.



If a demographic subgroup is selected, then a graphical display of the performance level percentages for that subgroup is displayed under the overall graph for easy comparison.

Overall Performance Level Percentages Graphic

For all students in the selected grade, student population, and displayed content, the percentages of Advanced, Proficient, Partially Proficient, and Not Proficient students are displayed in a horizontal bar graph. The

School Demographic Report

Year: 2017 | Assessment: M-STEP | ISD Code: 00000 | ISD Name: ABC ISD Name | District Code: 00000 | District Name: ABC School District | School Code: 00000 | School Name: ABC School Name

Grade 03 Mathematics All Students										
Grade 03: All Students		Demographic Subgroups	No. of Students Assessed	Mean Scale Score	% at NP	% at PP	% at P	% at A	% at P & A*	
Α	22%	✓ All	713	1293	44	13	20	22	42	
Р	20%	Gender								
-	129/	Male	360	1294	44	14	19	23	42	
FF		Female	353	1293	44	13	21	22	42	
NP	44%	Ethnicity								
		American Indian or Alaska Native	115	1300	42	5	20	33	53	
Former English Learner: Yes		Asian		93	44	19	14	22	36	
		Black or African American	9	4 97	36	16	26	22	48	
Α	23%	Hispanic or Latino	119	1285	51	19	21	8	29	
Р		Native Hawaiian or Other Pacific Islander	112	1291	48	16	12	24	36	
· .		Two or More Races	114	1294	44	8	28	20	48	
PP	12%	White	82	1296	43	11	18	28	46	
	E0%	Additional Reporting Groups								
NP	30%	Economically Disadvantaged: Yes	160	1292	46	12	24	18	42	
	1201 1261 Advanced	Economically Disadvantaged: No	553	1294	44	14	19	24	42	
P - 1300-1320 Proficient		English Learner: Yes	147	1293	46	12	22	20	42	
PP - 1281-1299 Partially Proficient		English Learner: No	566	1294	44	14	19	23	42	
NP - 1217-1280 Not Proficient		Former English Learner: Yes	148	1291	50	12	15	23	38	
		Former English Learner: No	565	1294	43	14	21	22	44	

legend beneath the graph provides the scale score ranges associated with each performance level.

Demographic Subgroup Performance Level Data Table

Performance level data, including the number of students assessed, mean scale score, and percentages of students in each performance level - Advanced, Proficient, Partially Proficient, Not Proficient—as well as advanced and proficient combined, are displayed for a number of demographic subgroups in a table.

The demographic subgroups reported are:

- Gender
 - Male
 - Female

Reports

- Ethnicity
 - American Indian or Alaska Native
 - Asian
 - Black or African American
 - Hispanic or Latino
 - Native Hawaiian or Other Pacific Islander
 - Two or More Races
 - White
- Additional Reporting Groups
 - Economically Disadvantaged: Yes
 - Economically Disadvantaged: No
 - English Learner: Yes
 - English Learner: No
 - Former English Learner: Yes
 - Former English Learner: No
 - Migrant: Yes
 - Migrant: No
 - Homeless: Yes Homeless: No
- Accommodations
 - Standard Accommodation—all students
 - Nonstandard Accommodation—all students
 - Standard Accommodation—EL only
 - Nonstandard Accommodation—EL only

Demographic Subgroup Performance Level Percentages Graphic

The user may select a demographic subgroup in the demographic table to compare against the overall student population. The selected demographic subgroup will be highlighted and a corresponding horizontal bar graph of the performance level percentages will display under the overall performance level graph.

Functionality

Filters

• Student Population

- Grade
- Content Area

Actions

The Actions button appears after a report is generated, and contains the following options for the Demographic Report:

- About this Report
- PDF Download To view a PDF of the Demographic Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area
- CSV File Download downloadable file that contains all student data that is contained on the report.
- CSV File Format file format that describes the data contained in the CSV file download.

Drill Down Feature - School Demographic Report

The School Demographic Report includes a drill-down feature that enables the user to select the link in the Number of Students Assessed column to open a Student Roster Report which includes the students represented in the aggregated group. When the Number of Students Assessed is zero, the '<' sign is not an active link. Note: In some instances, the number of students displayed may differ between the School Demographic Report and the generated Student Roster Report. This is because the Demographic Report does not include invalid tests, while the Student Roster Report does include invalid tests.

After a user has selected the link to drill down into the represented aggregate group, a breadcrumb area appears below the ISD/District/ School entity information, that displays 'Demographic Report – School > Student Roster'. Each report name in the breadcrumb is an active link. To return to the School Demographic Report, the user selects 'Demographic Report – School'.

The Drill Down feature is not available on the State, ISD, or District level Demographic Reports.



Comprehensive Report

The Comprehensive Report (below) provides a comparison of students by grade and content, aggregated across schools and districts, showing the percentages proficient at each level (Advanced, Proficient, Partially Proficient, and Not Proficient). The Comprehensive Report is available at the ISD and District levels.

After the user selects a grade to view, all tested content for that grade is displayed sequentially in alphabetical order. The report is divided into three main sections:



Overall performance level percentages for the selected student population in the grade and content displayed in graphical format.



Entity performance level data for each school (district report) or district (ISD report) in table format.



If an entity is selected in the table, then a graphical display of the performance level percentages for that entity is displayed under the overall graph for easy comparison.

District Comprehensive Report

Year: 2017 | Assessment: M-STEP | ISD Code: 00000 | ISD Name: ABC ISD Name | District Code: 00000 | District Name: ABC School District

Grade 6 | English Language Arts | All Students



2017 M-STEP Guide to Reports

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Overall Performance Level Percentages Graphic

For all students in the selected grade, student population, and displayed content, the percentages of Advanced, Proficient, Partially Proficient, and Not Proficient students are displayed in a horizontal bar graph. The legend beneath the graph provides the scale score ranges associated with each performance level.

Entity Performance Level Data Table

Performance level data, including the number of students assessed, mean scale score, and percentages of students in each performance level—Advanced, Proficient, Partially Proficient, Not Proficient—as well as Advanced and Proficient combined, are displayed for the applicable entities in a table.

- For ISD level reports, performance data for the districts in the ISD are reported.
- For district level reports, performance data for the schools, excluding nonpublic schools, in the district are reported.

Entity Performance Level Percentages Graphic

The user may select an entity in the entity table to compare against the overall ISD or district performance data. The selected entity will be highlighted and a corresponding horizontal bar graph of the performance level percentages will display under the overall performance level graph.

Functionality

Filters

- Student Population
- Grade
- Content Area

Actions

The Actions button appears after a report is generated, and contains the following options for the Demographic Report:

- About this Report
- PDF Download To view a PDF of the Demographic Report, select "PDF Download". This will open a PDF document of the reports, according to your selections in the filter area
- CSV File Download downloadable file that contains all student data that is contained on the report.
- CSV File Format file format that describes the data contained in the CSV file download.



Student Data File

The Student Data File (right) contains detailed individual student data in an excel file. This data includes school information, student demographic data, test administration data, and student performance data.

School information—student ISD, District, and School Code

Student Demographic Data—Includes grade, name, gender, ethnicity, UIC, Date of Birth. Also includes subgroup information including Economically disadvantaged, Special Education, Limited English Proficiency, Migrant status and Homeschooled information

Test Administration Data—Includes online/paper-pencil format, valid or invalid test, if invalid, includes reason for invalidation of the test, also includes whether student received accommodations.

Student Performance Data—Includes student scale score, Student Growth Percentile, Raw score data for science and social studies, and Claim performance indicators for ELA and math

The Student Data File is provided for schools to use as a data resource for school or district level data reviews. Schools or districts can use the Student Data File to manipulate and evaluate data in ways that support School Improvement goals or other data-based-decision making purposes.

CSV File

The Comma Delimited File (CSV) contains student performance data used in the selected report. This data includes school information, student population, demographic group, and student performance data.

School information—ISD, District, and School information included in the selected report

Demographic Data—demographic data, such as gender, ethnicity, Economically disadvantaged, Migrant status, or more are included, based on the data contained in the selected report.

Student Performance Data—student or student aggregate group scale scores and claim or discipline data are included, based on the data contained in the selected report.

M-STEP Student Data File Format

The downloaded file containing student test scores is a Comma Delimited File (CSV) with the following fields in order:

Please note: fields containing "Reporting Level" information are referring to Claims for ELA/Math and Disciplines for Science/Social Studies.

Excel Column	Field	Descriptor	Field Type (length)	Format
Α	TestCycleID	M-STEP test period and fiscal year	text(20)	
В	ISDCode	ISD code number	varchar(5)	99999
С	DistrictCode	District code number	varchar(5)	99999
D	SchoolCode	School code number	varchar(5)	99999
E	FeederSchoolCode	Prior school number that student attended	varchar(5)	99999
F	Grade	Student grade	varchar(2)	
G	LastName	Student last name	varchar(25)	
н	FirstName	Student first name	varchar(25)	
1	MiddleInitial	Student middle initial	char(1)	
1	Gender	Student's gender M = Male, F = Female	char(1)	
ĸ	Ethnicity	0 = Native Hawaiian or Other Pacific Islander 1 = American Indian or Alaska Native 3 = Black or African American 4 = Hispanic or Latino 5 = White 6 = Two or more Races 9 = Asian	Int(1)	9
L	UIC	Student UIC	char(10)	99999999999
М	StudentNumber	Student number from local school district	varchar(20)	
N	BirthDate	Student's date of birth	datetime(8)	mm/dd/yyyy
0	Barcode	Student's barcode number	varchar(10)	99999999999
Р	ED	Economically disadvantaged 1 = Yes, 0 = No	varchar(1)	
Q	SE	Special education 1 = Yes, 0 = No	varchar(1)	
R	EL	English learner 1 = Yes, 0 = No	varchar(1)	

The CSV File is provided for schools to use as a data resource for school or district level data reviews. Schools or districts can use the CSV files to evaluate data in ways that support School Improvement goals or other data-based-decision making purposes.

Section 6: Additional Resources

Additional Sources of Assessment Results

BAA Secure Site Data files

Data files are available for download from the BAA Secure Site Student Test Scores window for authorized school and district users. The <u>BAA</u> <u>Secure Site</u> (www.michigan.gov/baa-secure) can be accessed by authorized users only.

- Student Data File—includes individual student test results and performance
- Aggregate Data File—includes aggregated school, district, or ISD assessment results

MI School Data

<u>MI School Data</u> (www.michigan.gov/mischooldata) is an online public portal that provides views of Michigan education data to help make informed educational decisions, to help improve instruction and to enable school systems to prepare a higher percentage of students to succeed in rigorous high school courses, college and challenging careers.

General Resources

General additional resources are available on the <u>M-STEP webpage</u> (www.michigan.gov/mstep):

For instructions on how to obtain access to the Dynamic Reporting Site, go to <u>Secure Site Training</u> (http://www.michigan.gov/mde/0,4615,7-140-22709_57003---,00.html) and click How do I get access to the Secure Site?

Resources available on the M-STEP webpage:

- M-STEP and MME Performance Level (PL) Descriptors
- 2017 M-STEP Performance Level Scale Score Ranges
- 2017 M-STEP Student Data File Format
- Videos and information regarding Computer Adaptive Testing (CAT)
- Spring 2017-2019 Statewide Summative Assessments Calendar
- M-STEP: What it is, What it means, and What it Offers presentation
- Online Practice for M-STEP ELA, Math, Science and Social Studies
- Sample Item Sets
- Math and ELA Crosswalk Documents with Claims, Targets, and Standards

Also, be sure to sign up for the Office of Student Assessments' <u>Spotlight</u> <u>Newsletter</u> (www.michigan.gov/mde-spotlight) for weekly up-to-date information about Statewide Summative Assessments.



Section 7: Contact Information

School administrators, teachers, and counselors should become familiar with the report layouts and information contained in this document. If you have questions after reviewing this Guide to Reports, or need additional information about M-STEP administration procedures, content, scheduling, appropriate assessment of or accommodations for students with disabilities or English Learners (ELs), please contact the Michigan Department of Education Office of Educational Assessment and Accountability, using the contact information listed below:

Office of Educational Assessment and Accountability

Andrew Middlestead, Director, Office of Educational Assessments and Accountability

Katherine Cermak, Manager, Test Administration and Reporting

Phoebe Gohs, M-STEP Administration and Reporting Consultant

Linda Howley, Manager, Test Development

Suzanne Hindman, ELA Consultant

Kyle Ward, Mathematics Consultant

Scott Koenig, Social Studies Consultant

Tamara Smolek, Science Consultant

John Jaquith, Assessment Consultant for Students with Disabilities

Jennifer Paul, Assessment Consultant for English Learners

Ji Zeng, Ph.D., Lead Psychometrician, Psychometrics

Phone: 1-877-560-8378, option 3
Fax: 517-335-1186
Website: www.michigan.gov/mstep
E-mail: BAA@michigan.gov

Appendix C: Target Score Report

Psychometric Analysis Report for the Michigan 3-8 English Language Arts (ELA) and Mathematics Assessment Target Reporting

September 2017



DRC Psychometric Services Michigan Project Team Data Recognition Corporation

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Introduction

The assessment target score report is designed to report a group of students' (e.g., at the grade, school, teacher, and/or district levels) relative strength and weakness at the assessment target level. It is for aggregate level reports only.

Unlike the performance categories provided at the total test and claim levels, these strengths and weakness do not imply proficiency. Instead, they show how a group of students' performance is distributed across the content target relatively to their overall performance. For example, a group of students may have performed very well on a subject, but performed lower on a target. Thus, performance level code of C not necessarily imply a lack of proficiency, but that these students' performance on that target was lower than their performance across other targets put together. It can be concluded that the students performed lower than expected on that target.

Assessment target score report should serve as a starting point in an overall investigation of students' strengths and weaknesses and constitutes only one of many sources of evidence that should be used in evaluating student performance.

This was conducted for the English Language Arts (ELA) and Mathematics M-STEP assessments.

Methodology

Item response theory (IRT) based residual analysis can be used to conduct analyses for the assessment target score report. The residual is the difference between the observed score and expected score at the item level. The observed score is the score (e.g., 0 to 3) a student submitted for each item. The expected score is derived using the 2 parameter logistic (2PL) model for dichotomously scored items and generalized partial credit model (GPCM) for polytomously scored items.

The expected score for a multiple-choice item (MC, one point item) was computed using the twoparameter logistic (2PL) model as shown below in equation 1.

$$P_i (x_i = 1 | \theta, a_i, b_i) = \frac{\exp Da_i(\theta - b_i)}{1 + \exp Da_i(\theta - b_i)},$$
(1)

where a_i is item discrimination parameter and b_i is item difficulty for item *i*, and p_i is the probability of the item getting correct given the observed overall ability estimate, θ , and *D* is 1.7. The expected score

for a constructed response (CR) item, the observed overall ability estimate, θ , was computed with generalized partial credit mode (equation 2).

$$P_{ik} (x_i | \theta, a_i, b_{i0}, b_{i1}, \dots, b_{iK_i}) = P_{ik} (\theta) = \frac{\exp Da_i \sum_{k=0}^{K_i} (\theta - b_{ik})}{\sum_{r=0}^{K_i} [\exp Da_i \sum_{k=0}^r (\theta - b_{ik})]} ,$$
(2)

where $\sum_{k=0}^{0} (\theta - b_{ik}) \equiv 0$.

Equation (2) computes the probability of obtaining the score of $0 \le x_i \le K_i$ on CR item *i*. The item discrimination parameter is a_i , and b_{ik} is the category intersection parameter (in SBAC scoring specification, it is referred to step parameters). Equation (1) is a special case of equation (2) with $K_i = 1$. This means that the computation of probability can be completed for both 2PL MC and CR items using equation (2).

For all items, the residual, R_i , is found by using equation (3),

$$R_i = O_i - P_i(\theta) \tag{3}$$

where O_i is the observed score for item *i* and $P_i(\theta)$ is the expected score for item *i*.

Once the individual residuals were calculated, the weighted average of the residuals were calculated for each assessment target meeting the reporting criteria (see the Reporting Criteria Section below for more details) criteria using equation (4).

$$\bar{R}_{target} = \frac{1}{\sum_{i=1}^{N} w_i} \sum_{i=1}^{N} R_i \tag{4}$$

where R_i is the residual for item *i* and w_i is the weight associated with item *i* that accounts for the number of score points for that item.

Reporting Criteria

Target assessment results were reported for both ELA and Mathematics. Table 1 provides the claim and target level for which target assessment results were reported. Once the average residual for each assessment target was computed, a flagging criterion of +/- 0.05 was used to indicate the assessment target level performance. Table 2 provides a description of the performance levels.

Table 1: Assessment targets are listed below by content area.

ELA							
Claim		Assessment Target					
Claim 1	:	1					
		2					
	3	3					
	4	1					
	Ę	5					
	(5					
	-	7					
	8	3					
	Ģ	9					
	:	10					
	:	11					
	-	12					
	-	13					
	-	14					
Claim 2	-	1					
		2					
	:	3					
	4	1					
	(5					
	-	7					
	8	3					
	9	Э					
Claim 3	4	1					
Claim 4		2					
		3					
		4					

Math							
Claim	Assessment Target						
Claim 1	A						
	В						
	С						
	D						
	E						
	F						
	G						
	Н						
	I						
	J						
	К						
	L						
Claim 2	A						
	В						
	С						
	D						
Claim 3	А						
	В						
	С						
	D						
	E						
	F						
Claim 4	Α						
	В						
	С						
	D						
	E						
	F						

Table 2: Performance level descriptions.

PL Code	Target Level	Description
A	Better than performance on the test as a whole	This target is a relative strength. The group of students performed better on items from this target than they did on the rest of the test, as a whole.
В	Similar to performance on the test as a whole	This target is neither a relative strength nor a relative weakness. The group of students performed about as well on items from this target as they did on the rest of the test, as a whole.
С	Worse than performance on the test as a whole	This target is a relative weakness. The group of students did not perform as well on items from this target as they did on the rest of the test, as a whole.
	Insufficient Information	Not enough information is available to determine whether this target is a relative strength or weakness.

Additionally, since the M-Step administration was a CAT, the number of items presented in each assessment target varied for each administration. Thus, reporting criteria was used to ensure that a specified number of unique items were presented in order the assessment target results to be provided. The criteria used is listed below:

- Number of unique students per target: n=15
- Number of unique items per target: n=3
- Number of responses per target: n=25
- Use 0.05 criterion on the rescaled residual scale

Exclusions

It should be noted that some students were excluded from the target reporting analysis. Students who were Force Submit or scored at the lowest and highest obtainable scale score (LOSS and HOSS) were excluded from the analysis. Additionally, students with invalid tests and home schooled students were excluded.

Results

Aggregate results were provided to MDE by State, ISD, District, and Building. Private school students were only included in the building level aggregate results. Table 3 shows N count used at the state level and Tables 4 and 5 provide the state level results for ELA and Mathematics. Note that the PL codes in Tables 3 and 4 correspond to those found in Table 2.

Content Area	Grade	Ν
ELA	3	103,741
	4	106,970
	5	106,985
	6	106,209
	7	108,710
	8	107,841
Math	3	103,644
	4	107,103
	5	107,566
	6	106,102
	7	108,786
	8	107,446

Table 3: Valid student counts at the state level by content area and grade.

		Grade	e 3	Grade	e 4	Grade	e 5	Grade	e 6	Grade	e 7	Grade	e 8
Claim	Target	Valid	PL	Valid	PL	Valid	PL	PI Code	Valid	Valid	PL	Valid	PL
		Ν	Code	Ν	Code	Ν	Code	r L Coue	Ν	Ν	Code	Ν	Code
1	1	79,643	В	101,953	В	90,690	В	92,157	В	64,073	В	103,592	В
	2	89,083	В	90,844	В	84,186	В	48,113	В	47,895	В	54,472	В
	3	92,214	В	89,788	В	73,128	В	89,439	В	87,962	В	90,757	В
	4	80,125	В	73,296	В	82,015	В	44,184	Α	62,146	В	33,423	В
	5	67,103	В	31,500	В	50 <i>,</i> 438	В	77,209	В	77,981	В	21,364	D
	6	58,789	В	56,728	В	94,638	В	99,364	В	88 <i>,</i> 075	В	76,773	В
	7	46,281	В	94,881	В	82,297	В	44,954	В	81,696	В	63,222	С
	8	88,735	В	69,509	В	85,647	В	65,615	В	102,367	В	107,799	В
	9	68,697	В	97,904	В	87,446	В	103,943	В	108,697	В	107,839	В
	10	89,369	В	78,768	В	42,382	В	87,369	В	101,916	А	91,999	В
	11	82,751	В	67,866	В	97,600	В	101,942	В	105,117	В	100,605	В
	12	83,590	В	84,869	В	72,659	В	49,971	В	91,458	А	70,261	В
	13	80,694	В	82,760	В	85 <i>,</i> 035	В	70,272	В	99,777	А	11,882	В
	14	94,845	В	73,844	В	87,675	В	62,350	В	80,672	А	78,276	В
2	1	103,185	В	104,792	С	94,715	В	104,134	В	97,735	В	65 <i>,</i> 385	В
	2	74,139	В	97,521	С	37,964	D	100,892	С	107,332	С	34,478	D
	3	97,296	С	95,785	С	72,161	С	100,426	В	103,080	С	66,965	В
	4	103,185	В	101,953	В	34,487	D	92,157	В	64,073	В	34,451	D
	6	74,139	В	90,844	В	63,145	С	48,113	В	47,895	В	92,081	С
	7					34,534	D					38,912	D
	8	103,741	В	106,970	В	106,985	В	106,209	В	108,710	В	107,841	В
	9	103,741	В	106,970	В	106,985	В	106,209	В	108,710	В	107,841	В
3	4	103,741	В	106,970	Α	106,985	В	106,209	В	108,710	В	107,841	В
4	2	103,741	В	106,965	В	106,985	В	104,728	В	105,869	В	107,841	В
·	3	62,078	В	105,954	В	106,985	В	106,180	В	108,230	В	95,016	В
·	4	88,320	В	80,564	В	106,985	В	102,942	В	108,710	В	107,841	В

Table 4: State level aggregate results for ELA.

		Grad	e 3	Grad	e 4	Grad	e 5	Grade 6		Grad	e 7	Grade 8	
Claim	Target	Valid	PL	Valid	PL	Valid	PL	Valid	PL	Valid	PL	Valid	PL
		Ν	Code	Ν	Code	Ν	Code	Ν	Code	Ν	Code	Ν	Code
1	Α	103,644	В	49,104	В	42,803	В	106,102	В	108,779	В	96,816	В
	В	40,308	В	65,843	С	16,852	С	97,081	В	107,019	В	83,594	В
	С	97,757	В	8,290	В	104,649	В	100,855	В	108,112	В	104,527	В
	D	96,720	В	107,103	В	93,323	В	106,102	В	107,179	В	107,183	В
	E	103,134	В	85,453	В	107,316	В	85,654	В	76,032	В	107,347	В
	F	84,763	В	105,963	В	107,566	В	105,312	А	106,291	В	89,389	В
	G	78,784	В	107,103	В	71,410	С	59,192	В	68 <i>,</i> 379	В	72,782	В
	Н	103,644	В	107,103	В	44,825	В	79,031	В	53,361	В	82,496	В
	I	51,129	В	104,685	В	97,373	В	30,732	В	58,273	В	65,074	В
	J	31,219	В	32,970	В	106,904	В	80,301	В			29,600	В
	К	23,509	В	65,380	А	24,653	В						
	L			106,920	В								
2	Α	103,644	В	107,103	В	107,566	В	106,102	В	108,786	В	107,446	В
	В	63,375	В	9,719	В	17,878	С	5,721	В	10,241	D	15,787	А
	С	26,654	В	100,875	В	19,152	В	56,944	В	22,227	С	42,096	В
	D	13,615	В	9,350	В	74,111	В	106,102	В	98,889	В	45,421	В
3	Α	94,661	В	101,762	В	93,647	В	105,684	В	97,561	В	91,301	В
	В	91,352	В	104,172	В	107,566	В	72,914	В	66,269	В	107,446	В
	С	40,360	В	89,591	В	85,529	В	52,313	В	70,283	В	53,549	В
	D	94,619	В	91,015	В	98,737	В	56,427	В	88,791	В	101,938	В
	E	101,672	В	107,103	В	101,223	В	105,486	В	108,786	В	107,446	В
	F	100,300	В	76,874	В	107,566	В	103,518	В	108,786	В	60,222	В
	G							4,412	D	74,978	В	88,020	В
4	Α	103,644	В	107,103	В	107,566	В	87,858	В	108,786	В	107,446	В
	В	15,088	В	70,274	В	25,656	В	25,471	D	41,298	D	17,265	D
	С	75,248	В	50,077	В	32,304	В	26,269	В	16,843	D	33,644	В
	D	51,310	В	38,093	В	43,709	В	81,235	В	53,035	В	66,377	В
	E	92,107	В	102,943	В	81,910	В	80,631	В	67,488	В	90,181	В
	F	28,396	D	57,026	В	75,262	В	97,133	В	91,943	В	73,802	В

Table 5: State level aggregate results for Mathematics.

Considerations and Cautions

Unlike the performance levels provided at the total test and claim levels, these strengths and weakness do not imply proficiency. Instead, they show how a group of students' performance is distributed across the content target relatively to their overall performance. For example, a group of students may have performed very well on a subject, but performed lower on a target. Thus, a target performance code of C a target does not necessarily imply a lack of proficiency, but that these students' performance on that target was lower than their performance across other targets put together. In other words, the students performed lower than expected on that target. Although the students are doing well, the educators may still want to focus instruction on the targets with performance code C.

Assessment target score report should serve as a starting point in an overall investigation of students' strengths and weaknesses and constitutes only one of many sources of evidence that should be used in evaluating student performance.

Appendix D: M-STEP SGP and AGP Report

Psychometric Analysis Report for the Michigan English Language Arts (ELA), Mathematics, Science, and SAT Student Growth Percentile and Adequate Growth Percentile Reporting

March 2018



DRC Psychometric Services Michigan Project Team Data Recognition Corporation

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Introduction

The use of student growth models is common in K-12 testing. The most commonly used approaches by states are conditional growth percentile models, which include student growth percentiles (SGPs, Betebenner, 2008; 2009; 2011) or an alternative known as percentile rank residuals (Castellano & Ho, 2013). Both models attempt to describe individual student growth relative to other students who are academically similar by using prior test scores as predictors. Adequate growth percentiles (AGPs, Betebenner, 2008; 2009; 2011) which use quantile regression models, provide the likelihood students are on track to reaching or maintaining proficiency at some time point in the future. Individual level results from these models can be aggregated at a group level.

SGP analyses were conducted for the M-STEP, SAT, and WIDA, and PRR analysis was conducted for MI-Access assessments. AGP analyses were conducted for M-STEP.

Methodology

Student Growth Percentiles (SGP)

For assessments with a sufficient sample size (M-STEP, SAT, and WIDA Access) student growth percentiles (SGPs) were calculated using the R SGP package (Betebenner et. al., 2015) version 1.7-7.7 as compiled from the master branch of the SGP GitHub repository. SGPs defined this way take a normative approach.

Specially, let Y_t denote an assessment score at time t, the expected value of Y_t at the τ -th quantile, $Q_{Y_t}(\tau | Y_{t-1}, ..., Y_1)$ based on prior assessment scores $Y_{t-1}, ..., Y_1$, is then given by (Betebenner, 2011, p17)

$$Q_{Y_t}(\tau | Y_{t-1}, ..., Y_1) = \sum_{j=1}^{t-1} \sum_{i=1}^{3} \phi_{ij}(Y_j) \beta_{ij}(\tau)$$
(1)

Where ϕ_{ii} , i = 1, 2, 3 and j = 1, ..., t - 1 denote the B-spline basis functions for quantile τ . For instance, for

 τ =.5, Q_{Y_t} returns the estimated median expectation of Y_t for any combination of $Y_{t-1}, ..., Y_1$. This analysis used the default parameters of the SGP package which generates 1+7*(number of pretest) parameters per quantile. For example, for a 3-pretest model we have 1+7*3 = 22 parameters per quantile and we estimate 100 quantiles independently (from 0.005 to 0.995 in 0.01 increments).

Calculating a SGP from equation 1 requires prior test score information to determine predicted scores. The SGP for a student is defined as the midpoint of the (ranked) two quantiles between which the student's score falls.

$$SGP_{i} = \left(\max\{\tau_{i}, \hat{Q}_{\tau}(Y|X=x_{i}) < y_{i}\} + \min\{\{\tau_{i}, \hat{Q}_{\tau}(Y|X=x_{i}) > y_{i}\}\} * \frac{100}{2}$$
(2)

Where x_i is the student *i*'s vector of prior test scores.

Note that while the SGP package can simulate CSEMs, for the initial Fall 2017 SGP student data files, the CSEM was not available.

Adequate Growth Percentiles (AGP)

Using the same methodology as described above for calculating SGPs, to calculate a projection or the trajectory a student needs to meet a certain target. An adequate growth percentile, AGP, is the SGP that a student needs to have to meet or exceed the proficient cut score (or any pre-determined achievement target) within a specified time frame (number of academic years).

Betebenner (2011) contextualizes AGPs in terms of "catch-up", "keep-up", or "move-up." Suppose that an AGP is calculated for a given students Y years away. The following would apply:

Catch-Up is used for students currently not proficient who are expected to reach proficient within *Y* years or by the time they have finished their education, whichever comes first

Keep-Up is used for students currently at or above proficient who are expected to remain at or above proficient for all *Y* years or by the time they have finished their education, whichever comes first.

Move-Up is used for students currently proficient who are expected to advance beyond proficient within *Y* years or by the time they have finished their education, whichever comes first.

Additionally, a lagged AGP target is also calculated and this value is similar to the AGP. But in this case the current year AGP (i.e. 2017) using the quantile regression model. This gives information to determine if students are on track to reaching proficiency or if they will maintain proficiency over a specified number of years.

Percentile Rank Residuals (PRR)

For assessments with small sample sizes (MI-Access), the PRR method (Castellano & Ho, 2013) was used to estimate the conditional student growth percentiles. This method uses an ordinary least squares (OLS) model, where the predictors consist of past student achievement data.

$$Y_{it} = \beta_0 + \beta_1 y_{i(t-1)} + \beta_2 y_{i(t-2)} + \varepsilon_{it}$$
(5)

where Y_{it} is the observed score on the assessment at time t for student i, $Y_{i, t-1}$ is the observed score at prior time 1 and $Y_{i, t-2}$ is the observed score at prior time 2. The β s are the regression coefficients, and ε_{it} is a residual error.

After estimating Equation 5, the residuals are calculated using Equation 6:

$$\hat{\varepsilon}_{it} = y_{it} - \hat{y}_{it} \tag{6}$$

where $\hat{\varepsilon}_{it}$ is the residual for student *i* at time *t*, \hat{y}_{it} is the predicted score from equation 5.

Next, the residuals are rank ordered (Castellano & Ho, 2013, p. 195).

$$PRR_{it} = F(\hat{\varepsilon}_{it}) \times 100 = \frac{\#residuals \le \hat{\varepsilon}_{it}}{n} \times 100$$
(7)

where $\hat{\varepsilon}_{it}$ is the residual for student *i* at time *t* and *n* is the total sample size for all students with MI-Access FI results for a given posttest in 2016-17.

A standard error of measurement can be obtained by simulation for this method. Specifically, for a given posttest, y_{it} , and $CSEM(y_{it})$ 100 posttest were simulated such that they follow a normal distribution given by Equation 8:

$$y_{its} \sim N(mean = y_{it}, sd = CSEM(y_{it}))$$
(8)

For each simulated y_{its} , calculate the corresponding PRR using equations 5-7 while holding all other student data constant. Repeat this for each student.

Reporting Results

Results were reported at both the student and aggregate levels. This section provides a brief overview of the results provided to MDE.

For each assessment, results were reported for different content areas. Table 1 provides a list of the assessment and content areas combinations for which SGPs or PRRs were provided. Table 1 provides a list of the grades and domains for which results were reported. Content areas for which AGPs are calculated are also noted in Table 1.

Grade	M-STEP	SAT	MI-Access	WIDA
К				Overall Composite
1				Overall Composite
2				Overall Composite
3	ELA, Math		ELA, Math	Overall Composite
4	ELA, Math, Science		ELA, Math, Science	Overall Composite
5	ELA, Math, Social		ELA, Math, Social Studies	Overall Composite
	Studies			
6	ELA, Math		ELA, Math	Overall Composite
7	ELA, Math, Science		ELA, Math, Science	Overall Composite
8	ELA, Math, Social		ELA, Math Social Studies	Overall Composite
	Studies			
11	Science, Social Studies	ELA,	ELA, Math, Science, Social Studies	Overall Composite
		Math		
12				Overall Composite

AGP Projections

For ELA and Math grades 4 through 8, AGP targets and/or lagged targets were computed for 1 to 4 years from 2017 or 8th grade, whichever comes first. For example, a grade 4 student had AGPs to grades 5,6,7, and 8. While a grade 7 student had an AGP to 8th grade. Lagged AGP targets are calculated for Grades 4 through 8. Tables 2 and 3 show the grade progressions for AGP and AGP lagged targets.

	Projected AGP Target Year					
Grade	1 Year	2 Year	3 Year	4 Year		
	2018	2019	2020	2021		
4	5 th grade	6 th grade	7 th grade	8 th grade		
5	6 th grade	7 th grade	8 th grade			
6	7 th grade	8 th grade				
7	8 th grade					
8						

Table 2: M-STEP Math and ELA AG	P targets by grade, projection yea	r, and grade projected to
---------------------------------	------------------------------------	---------------------------

Table 3: M-STEP Math and ELA AGP Lagged Targets by Grade and Projection Year

Projected AGP Lagged Target Year					
Grade	Current	Current +1	Current +3		
2016	Year	Year	Year Year		
	2017	2018	2019	2020	
3	4 th grade	5 th grade	6 th grade	7 th grade	
4	5 th grade	6 th grade	7 th grade	8 th grade	
5	6 th grade	7 th grade	8 th grade		
6	7 th grade	8 th grade			
7	8 th grade				

Categorization of Individual (Level) Growth Percentiles

Individual (level) growth percentiles (either SGP or PRR) will also be assigned one of three categorical descriptors based on MDE reporting policies, which are defined as:

- Low: SGP 1-29
- Medium: SGP 30-69
- High: SGP 70-99

Additionally, individual (level) growth percentiles (either SGP or PRR) will also be assigned one of five categorical descriptors based on historical MDE accountability policies. These five categorical descriptors are no longer used in MDE accountability processes but were still calculated for analysis purposes. The five categorical descriptors are defined as:

• Significant Decline (SGP 0-19

- Decline (SGP 20-39)
- Maintain (SGP 40-59)
- Improvement (SGP 60-79)
- Significant Improvement (SGP 80-99)

Valid Test Sequence Rules

Identified suitable pathways and their information can be found in Table 4 for the SGP method (M-STEP/SAT), the PRR approach (MI-Access FI), and the SGP method (WIDA Access).

Table 4: M-STEP Testing Program Valid Sequence for SGP/AGP Calculations

Program	Grade	Prior	Prior
	2017	Year 1	Year 2
M-STEP ELA & Math	4	M-STEP 3 rd grade Spring 2016	
	5	M-STEP 4 th grade Spring 2016	M-STEP 3 rd grade Spring 2015
	6	M-STEP 5 th grade Spring 2016	M-STEP 4 th grade Spring 2015
	7	M-STEP 6 th grade Spring 2016	M-STEP 5 th grade Spring 2015
	8	M-STEP 7 th grade Spring 2016	M-STEP 6 th grade Spring 2015
SAT	11	MEAP 8 th grade Fall 2013	MEAP 7 th grade Fall 2012
M-STEP Science	11	MEAP 8 th grade Fall 2013	MEAP 5 th grade Fall 2010
MI-Access ELA & Math	4	MI-Access 3 rd grade Spring 2016	
	5	MI-Access 4 th grade Spring 2016	MI-Access 3 rd grade Spring 2015
	6	MI-Access 5 th grade Spring 2016	MI-Access 4 th grade Spring 2015
	7	MI-Access 6 th grade Spring 2016	MI-Access 5 th grade Spring 2015
	8	MI-Access 7 th grade Spring 2016	MI-Access 6 th grade Spring 2015
	11	MI-Access 8 th grade Fall 2013	MI-Access 7 th grade Fall 2012
MI-Access Science	11	MI-Access 8 th grade Fall 2013	MI-Access 5 th grade Fall 2010
WIDA	1	WIDA Kindergarten Spring 2016	
	2	WIDA 1 st grade Spring 2016	WIDA Kindergarten Spring 2015
	3	WIDA 2 nd grade Spring 2016	WIDA 1 st grade Spring 2015
	4	WIDA 3 rd grade Spring 2016	WIDA 2 nd grade Spring 2015
	5	WIDA 4 th grade Spring 2016	WIDA 3 rd grade Spring 2015
	6	WIDA 5 th grade Spring 2016	WIDA 4 th grade Spring 2015
	7	WIDA 6 th grade Spring 2016	WIDA 5 th grade Spring 2015
	8	WIDA 7 th grade Spring 2016	WIDA 6 th grade Spring 2015
	9	WIDA 8 th grade Spring 2016	WIDA 7 th grade Spring 2015
	10	WIDA 9 th grade Spring 2016	WIDA 8 th grade Spring 2015
	11	WIDA 10 th grade Spring 2016	WIDA 9 th grade Spring 2015
	12	WIDA 11 th grade Spring 2016	WIDA 10 th grade Spring 2015

Minimum Number of Students

A minimum of 5,000 students will be required for the SGP M-STEP & SAT run. A minimum of 1,000 students is preferred for the MI-Access FI PRR run. A minimum of 2,000 students will be required for the SGP WIDA Access for ELLs 2.0 run.

Repeat Test Takers

Students who repeated the grade immediately before the posttest will not be included in either the SGP or the PRR analysis, thus the SGPs were not calculated for these students. For instance, if posttest score (Y_t) and prior 1 year score (Y_{t-1}) are with the same grade, the student is not included in the analysis and does not receive an SGP.

Skipped Grades

Students who skipped the grade immediately prior to the posttest will not be included in the analysis (i.e. 5th grade posttest following skipping 4th grade in the previous example.) In addition, if a student has a test sequence with a skipped grade, only the grade prior will be used to calculate the SGP.

Gaps in Test Sequence

Some students in the dataset are missing certain years of test scores. This may be due to student mobility, missed test windows, or other factors (e.g., Grade 3 M-STEP ELA in Spring 2015, followed by Grade 5 M-STEP ELA in Spring 2017). Students with a gap will not be included unless they have a recent, valid sequence leading up to the posttest.

Home School and Private School Exclusion

All home schooled and private school test records will be excluded from computing SGP. MDE will ensure that students who were previously tested as home schooled or at a private school are also excluded from the data pull.

Student Level Results for SGPs and PRRs

Student level results provided to MDE for SGPs and PRRs included:

- 1. Demographic and assessment information
- 2. SGPs
- 3. SGP standard errors
- 4. SGP Growth Level Code
- 5. SGP Norm Group
- 6. Estimation Method
- 7. Prior achievement information used

Student Level Results for AGPs

Student level results provided to MDE for AGPs included:

- 1. Demographic and assessment information
- 2. AGP Years Projected (1-4)

- 3. AGP Target
- 4. AGP Lagged Target
- 5. AGP Stay/Move Up Target
- 6. AGP Lagged Stay/Move Up Target

Aggregation

Results were aggregated by assessment and accountability at the state, district, and school level using a variety of subgroups specified by MDE. Aggregation results included:

- 1. Count of students included
- 2. Average (arithmetic mean) of the SGPs
- 3. Standard deviation of SGPs
- 4. Count of students at each of five growth levels (Significant Improvement, Improvement, Maintain, Decline, Significant Decline)
- 5. Percentage of students at each of these five levels as a percentage of total students with SGPs
- 6. Count of students at each of three growth levels (Low, Medium, High)
- 7. Percentage of students at each of these three levels as a percentage of total students with SGPs.
- 8. Building z-score

Quality Control

DRC's psychometric team verified the data coming from MDE followed the rules, structure, and specifications agreed upon by both DRC and MDE. Any issues around unexpected data or missing fields were addressed by MDE.

To ensure that the proper growth model was used, base R code was written by the psychometrician and verified by a consultant and a statistical analyst. The code for each subject was reviewed and SGP, PRR, or AGP values were internally checked for reasonability. Two staff members from the psychometric services team verified aggregate results by independent replication, and MDE reviewed the reasonability of the aggregate and individual SGP, PRR, or AGP results. Results went through several iterations of independent replication and MDE review until all discrepancies were resolved.

Summary of Results

Tables 5 through 9 provide a summary of the number of students and median growth SGPs or PRR values by aggregate levels. Tables 5 and 6 provide the summary of number of students and median growth (SGP or PRR) by testing program, calculation method, content area, and grade. Table 7 provides the results by calculation method, content area, and grade. Table 8 provides the results by content area and grade and Table 9 provides the results by grade. As expected with these methods, the median values tend to be near 50.

Testing Program	Content Area	Grade	N	Median
M-STEP	English Language Arts	4	103,630	50
		5	103,625	50
		6	102,305	50
		7	105,481	50
		8	104,321	50
	Mathematics	4	103,569	50
		5	103,718	50
		6	102,155	50
		7	105,364	50
		8	104,485	50
	Science	11	94,157	50
SAT	English Language Arts	11	92,728	50
	Mathematics	11	92,880	50
WIDA	WIDA	1	8,521	50
		2	9,077	50
		3	9,586	50
		4	7,084	50
		5	6,261	51
		6	5,458	51
		7	5,466	51
		8	5,465	51
		9	5,102	50
		10	4,042	51
		11	2,961	51
		12	2,343	51

Table 5: Number of Cases and Median SGP by Testing Program, Content Area, and Grade

Table 6: Number of Cases and Median PRR by Testing Program, Content Area, and Grade

Testing Program	Content Area	Grade	Ν	Median
MI-Access	English Language Arts	4	1,137	50
		5	1,309	52
		6	1,346	50
		7	1,381	51
		8	1,335	50
		11	852	50
	Mathematics	4	1,177	50
		5	1,359	51
		6	1,414	51.5
		7	1,502	51.5
		8	1,462	50
		11	910	51
	Science	11	925	50

Method	Content Area	Grade	N	Median
PRR	English Language	4		
	Arts		1,137	50
		5	1,309	52
		6	1,346	50
		7	1,381	51
		8	1,335	50
		11	852	50
	Mathematics	4	1,177	50
		5	1,359	51
		6	1,414	51.5
		7	1,502	51.5
		8	1,462	50
		11	910	51
	Science	11	925	50
SGP	English Language Arts	4	103,630	50
		5	103,625	50
		6	102,305	50
		7	105,481	50
		8	104,321	50
		11	92,728	50
	Mathematics	4	103,569	50
		5	103,718	50
		6	102,155	50
		7	105,364	50
		8	104,485	50
		11	92,880	50
	Science	11	94,157	50

Table 7: Number of Cases and Median Growth by Method, Content Area, and Grade

Table 8: Number of Cases and Median Growth by Content area and Grade

Content Area	Grade	Ν	Median
English Language Arts	4	104,767	50
	5	104,934	50
	6	103,651	50
	7	106,862	50
	8	105,656	50
	11	93,580	50
Mathematics	4	104,746	50
	5	105,077	50
	6	103,569	50
	7	106,866	50
	8	105,947	50
	11	93,790	50
Science	11	95,082	50

Table 9: Number of Cases and Median Growth by Grade

Grade	Ν	Median
1	8,521	50
2	9,077	50
3	9,586	50
4	216,597	50
5	216,272	50
6	212,678	50
7	219,194	50
8	217,068	50
9	5,102	50
10	4,042	51
11	285,413	50
12	2,343	51

Goodness of Fit

To examine the fit of the growth models, the correlations between the outcome score (2017) and the prior achievement score was calculated. Tables 10 and 11 provide the correlations by program, content area, and grade. All correlations are acceptable and within the moderate range. For the M-STEP program, all correlations are consistent within content area. In Mathematics and English Language Arts, correlations above 0.80, for Science it is 0.75. With the SAT correlations are slightly lower; 0.73 for English Language Arts and 0.80 for Mathematics. WIDA correlations are fairly consistent but lower, ranging from 0.65 to 0.79. Finally, the correlations for MI-Access are consistent within content area but

lower ranging from 0.52 to 0.66 for English Language Arts, from 0.48 to 0.65 for Mathematics, and 0.58 for Science.

Table 10: Correlation between Current SS and Prior SS by Testing Program, Content Area, and Grade for SGP Models

Testing Program	Content Area	Grade	Ν	Correlation
M-STEP	English Language Arts	4	103,630	0.82
		5	103,625	0.83
		6	102,305	0.83
		7	105,481	0.84
		8	104,321	0.83
	Mathematics	4	103,569	0.84
		5	103,718	0.85
		6	102,155	0.85
		7	105,364	0.87
		8	104,485	0.84
	Science	11	94,157	0.75
SAT	English Language Arts	11	92,728	0.73
	Mathematics	11	92,880	0.80
WIDA	WIDA	1	8,521	0.65
		2	9,077	0.75
		3	9,586	0.78
		4	7,084	0.73
		5	6,261	0.74
		6	5,458	0.71
		7	5,466	0.75
		8	5,465	0.79
		9	5,102	0.76
		10	4,042	0.77
		11	2,961	0.75
		12	2,343	0.73

 Table 11: Correlation Between Current SS and Prior SS by Testing Program, Content Area, and Grade for PRR

 Model

Testing Program	Content Area	Grade	Ν	Correlation
MI-Access	English Language Arts	4	1,137	0.60
		5	1,309	0.59
		6	1,346	0.62
		7	1,381	0.66
		8	1,335	0.64
		11	852	0.52
	Mathematics	4	1,177	0.53
		5	1,359	0.55
		6	1,414	0.48
		7	1,502	0.60
		8	1,462	0.65
		11	910	0.55
	Science	11	925	0.58

Distributions of SGPs and PRRs

The distributions of SGPs and PRRs are provided in Figure 1 through Figure 3, which shows that SGPs tend to uniformly range from 1 to 99. While the PRRs also range from 1 to 99, they are a bit less stable due to the small sample sizes used in the calculations. It should be noted that the differences distributions of PRRs and SGPs across grade and content area tend to be relatively small given the scale of the density plots range from 0 to 0.012.



Figure 1. Distribution of SGP/PRR for Mathematics Grades, 4 and 5



Figure 2. Distribution of SGP/PRR for Mathematics Grades, 6 and 7



Figure 3. Distribution of SGP/PRR for Mathematics Grades, 8 and 11



Figure 4. Distribution of SGP/PRR for English Language Arts Grades, 4 and 5



Figure 5. Distribution of SGP/PRR for English Language Arts Grades, 6 and 7



Figure 6. Distribution of SGP/PRR for English Language Arts Grades, 8 and 11



Figure 7. Distribution of SGP/PRR for Science, Grade 11

Checks for Neutrality

Since the growth models used in this analysis do not control for demographic variables, particularly those that may have some impact on student growth rates and trajectories, it is unknown whether the results are biased, especially when aggregated at the school or district level (Education Analytics, 2015). Thus, it is important to look at the relationship between the aggregated growth measure, in this case median SGP and the variables of interest that were not controlled for in the growth models. It is important to note that it is unknown what the correlations "should be." Tables 12 and 13 provide the correlations between the median SGP for a school or a district (with more than 20 students) related to the percentage of each demographic for that building or district. Graphs of these relationships can be found in the appendix.

Table 12: Correlations between Median SGP and Demographic at the School Level

Content Area	ED	SE	LEP	Non-White
English Language Arts	-0.32	-0.15	0.06	-0.16
Mathematics	-0.38	-0.12	-0.01	-0.25
Science	-0.44	-0.23	-0.08	-0.37
WIDA	-0.33	-0.18		-0.09

Table 13: Correlations between Median SGP and Demographic at the District Level

Content Area	ED	SE	LEP	Non-White
English Language Arts	-0.25	-0.23	0.06	0.02
Mathematics	-0.33	-0.18	0.03	-0.18
Science	-0.32	-0.11	-0.08	-0.28
WIDA	-0.33	-0.24		-0.14

When aggregating growth model outcomes, it is also important to note that growth models, as with most regression models, have issues (more variability or less precision) when sample sizes are small. This is also true when aggregating growth model results at the school level. Figure 8 provides the relationship between the number of students and SGP. This shows that there is less variability in median SGP as the number of students increase.



Figure 8. Number of Students versus SGP

AGP Outcomes

In 2017, AGPs and target AGPs were computed for M-STEP ELA and Mathematics, grades 4 through 8. The number of years projected in the model was varied between 1 and 4. Details can be found in Tables 2 and 3. One way to aggregate these results is to compare the percentage of students meeting targets by their 2017 performance level, grade, and years projected. Tables 14 and 15 do this by showing the percentage of students, by grade, who have a 2017 SGP greater than their 2017 lagged AGP, broken down by proficiency level, grade, and years projected. For example, in Grade 4 ELA, 67% of proficient students are on track to remain proficient (or reach advanced) in three years' time. These tables show that students who end in the highest performance level (Advanced) do so because they consistently grew at levels surpassing that which was necessary to achieve and maintain proficient) do so because they consistently grew at levels well below what was necessary to reach proficiency.

Table 14: Percentage of Students Whose 2017 SGP Exceeds their Lagged by Performance Level and Years Projected for M-STEP ELA

		Not Proficient		Partially Proficient		Proficient		Advanced	
Grade	Years Projected	N Total	% 2017 SGP Exceeds Lagged AGP	N Total	% 2017 SGP Exceeds Lagged AGP	N Total	% 2017 SGP Exceeds Lagged AGP	N Total	% 2017 SGP Exceeds Lagged AGP
4	1	35,539	0%	21,875	23%	22,991	90%	23,225	100%
	2	35,539	1%	21,875	29%	22,991	71%	23,225	98%
	3	35,539	4%	21,875	36%	22,991	67%	23,225	95%
	4	35,539	7%	21,875	39%	22,991	66%	23,225	93%
5	1	26,083	0%	24,008	5%	32,600	78%	20,934	100%
	2	26,083	0%	24,008	19%	32,600	70%	20,934	98%
	3	26,083	2%	24,008	27%	32,600	68%	20,934	97%
	4	26,083	2%	24,008	27%	32,600	68%	20,934	97%
6	1	29,452	0%	27,691	13%	29,895	86%	15,267	100%
	2	29,452	1%	27,691	26%	29,895	79%	15,267	100%
	3	29,452	1%	27,691	26%	29,895	79%	15,267	100%
	4								
7	1	29,781	0%	27,793	14%	33,760	90%	14,147	100%
	2	29,781	0%	27,793	14%	33,760	90%	14,147	100%
	3								
	4								
8	1	23,656	0%	29,970	0%	36,854	96%	13,841	100%
	2								
	3								
	4								

		Not Proficient		Partially Proficient		Proficient		Advanced	
			% 2017		% 2017		% 2017		% 2017
Grade	Years Projected		SGP		SGP		SGP		SGP
		N Total	Exceeds	N Total	Exceeds	N Total	Exceeds	N Total	Exceeds
			Lagged AGP		Lagged AGP		Lagged AGP		Lagged AGP
4	1	24,785	0%	34,817	1%	27,063	68%	16,904	100%
	2	24,785	0%	34,817	10%	27,063	64%	16,904	99%
	3	24,785	0%	34,817	20%	27,063	63%	16,904	97%
	4	24,785	1%	34,817	23%	27,063	60%	16,904	94%
5	1	35,774	0%	31,131	10%	19,330	81%	17,483	100%
	2	35,774	0%	31,131	26%	19,330	76%	17,483	99%
	3	35,774	3%	31,131	30%	19,330	67%	17,483	95%
	4	35,774	3%	31,131	30%	19,330	67%	17,483	95%
6	1	33,341	0%	33,415	15%	19,445	88%	15,954	100%
	2	33,341	0%	33,415	24%	19,445	74%	15,954	98%
	3	33,341	0%	33,415	24%	19,445	74%	15,954	98%
	4								
7	1	36,690	0%	29,919	10%	20,840	76%	17,915	100%
	2	36,690	0%	29,919	10%	20,840	76%	17,915	100%
	3								
	4								
8	1	40,854	0%	28,068	1%	17,413	93%	18,150	100%
	2								
	3								
	4								

 Table 15: Percentage of Students Whose 2017 SGP Exceeds their Lagged by Performance Level and Years

 Projected for M-STEP Math

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Appendix



Relationship between School-Level Growth and Percent LEP English Language Arts Median SGP



Relationship between School-Level Growth and Percent NonWhite English Language Arts Median SGP





Relationship between School-Level Growth and Percent ED Mathematics Median SGP



Relationship between School-Level Growth and Percent LEP Mathematics Median SGP




Relationship between School-Level Growth and Percent SE Mathematics Median SGP



Relationship between School-Level Growth and Percent ED Science Median SGP





Relationship between School-Level Growth and Percent NonWhite Science Median SGP



Relationship between School-Level Growth and Percent SE Science Median SGP





Relationship between School-Level Growth and Percent LEP WIDA Median SGP





Relationship between School-Level Growth and Percent SE WIDA Median SGP



Appendix E: Mode of Comparison

Appendix E: Conversion Relation Study of Online and Paper-Pencil Administrations for M-STEP Science and Social Studies

Overview

For 2017 M-STEP Science and Social Studies, more than 95% of students statewide took the online forms. When conversion tables were created, no paper-pencil data were available, thus the most similar online form's conversion tables were applied to the corresponding paper-pencil form. However, whether such approach is appropriate needs to be examined. The current study thus aims at addressing the following question: Is it appropriate to apply the most similar online form's (will be referred to as CBT hereafter) conversion table to the paper-pencil form (will be referred to as PPT hereafter)?

This appendix is organized around three major sections: Propensity Scores and Matched Samples, Comparability Analyses and Results, and Discussion and Conclusion. For the propensity score matching and mode comparison reported here, we follow the procedures listed in Zeng, Yin, and Shedden (2015) with some modifications to better address the question here.

Section 1: Propensity Scores and Matched Samples

This section describes how matched samples are formed. Specifically, the concept of propensity score was introduced, along with the description of propensity score matching procedures.

1.1 Propensity Scores

A propensity score is the conditional probability of assignment to treatment (in current report, take PPT instead of CBT) given the covariates, and it does not depend on the response information (Rosenbaum & Rubin, 1985). When the treatment variable is dichotomous, logistic regressions with the treatment assignment as an outcome are used to estimate the propensity scores (e.g., Harder, Stuart, & Anthony, 2010). In this report, the PPT was coded as 1 and the CBT was coded as 0. After propensity scores are estimated, different approaches such as matching, weighting, and subclassification can be applied to form comparable groups (Harder et al., 2010; Stuart, 2010).

In this report, we only considered pair matching in forming comparable groups with the same sample size. Five issues need to be considered when conducting propensity score matching (Zeng et al., 2015): (1) choice of covariates, (2) dealing with missing data on the covariates, (3) matching methods, (4) assessing the matching quality, and (5) the possible violations of ignorable treatment assignment. All these issues are discussed in section 1.2 below, and the fifth one is also tackled with in the Discussion and Conclusion section.

1.2 Propensity Score Matching Procedures

This section provides detailed information on the five issues mentioned above when conducting propensity score matching.

(1) Choice of Covariates

Three types of covariates can be included in a propensity score estimation model:

- a variable related to both the outcome and the treatment,
- a variable related to only the outcome, and
- the variable related only to the treatment.

Simulation studies found that the optimal propensity score model was the one only included the first two types of variables mentioned above (i.e., a variable related to both the outcome and the treatment, and a variable related to only the outcome) (Brookhart et al., 2006). Steiner et al. (2010) found that the first type mentioned above (i.e., a variable related to both the outcome and the treatment) was crucial for removing bias. Pre-test measures were found to be highly correlated to potential outcomes (Steiner et al., 2010), and were therefore suggested to be included as covariates for estimating propensity scores. Socioeconomic status (SES) is a student-level variable that is possibly relevant to any score differences across mode (Pomplun, Ritchie, & Custer, 2006). Way, Lin, & Kong (2008) used all possible prior achievement scores in their mode comparability study.

To fully utilize the capability of propensity scores in balancing multiple covariates, we included all possible prior year achievement scores and current year achievement scores (excluding the subject area under examination). In addition, we also included all available demographic variables at the student level: female (1 for female, 0 for male), White (1 for White, 0 otherwise), Black (1 for Black, 0 otherwise), Hispanic (1 for Hispanic, 0 otherwise), Asian (1 for Asian, 0 otherwise), Economically Disadvantaged (ED, 1 if yes, 0 if no), Special Education (SE, 1 if yes, 0 if no), and English Language learner (EL, 1 if yes, 0 if no).

Based on the data, we observe that some school buildings have the corresponding grade level participate via one administration mode only, but some school buildings have the corresponding grade level participate via both administration modes. Since we use student level data for calibration and equating, we do not consider building level variables in propensity score model building. However, building level variables were used for data imputation. Related details can be found below where missing data issue is discussed.

(2) Dealing with missing data on the covariates

Since we do not want to exclude any PPT students¹ from this investigation, while quite a few of them were found to have missing data on previous achievement or even some current year achievement, we had to use imputation. Although various missing data handling techniques have been proposed in the context of propensity score estimation, no significant differences in treatment effect estimations were found between various techniques applied to real data sets (Harder et al., 2010). For this report, a multiple imputation procedure was carried out using the R package MICE (van Buuren & Groothuis-Oudshoorn, 2011), which conducts multivariate imputation by chained equations. However, instead of using the multiple imputed values, we only used one set of imputed values to simplify the analysis, thus in essence a single imputation approach.

As mentioned above, the building level data are not used in propensity score model building, but only used in imputation. The building level data are: N-count per building for the grade level under consideration, percent female, percent White, percent Black, percent Hispanic, percent Asian, percent ED, percent SE, percent EL, average scale score in past two years or one year², and the average percent proficient in Science and Social Studies in past two years. Note that the teacher information was not considered at the building level as we do not have student-teacher nesting information for the school year of 2016-2017.

Since we have both the building level and student level variables, we did the imputation in two steps. The first step imputation was conducted at the building level, and the imputed building level data were combined with student level variables to conduct the second step imputations at the student level. The imputed student level data with only student level variables were then used to build propensity score models and to form matched samples. The N-counts for PPT and CBT students used in propensity score models per subject/grade combination can be found in Table 1.1. Note that the N-counts for CBT in Table 1.1. is not for all CBT students, but for the most similar CBT form (for Science) and the largest N-count CBT form (for Social Studies) students. These are the real CBT pool used for propensity score building and pair matching. For additional information, see footnote 2.

¹ Note that duplicated ID records were excluded. Only 1 or 2 (at maximum) such cases were found and excluded per subject/grade combination.

² M-STEP program started in Spring 2015, so for grade 3-8, we have two years of M-STEP data in all subject areas at building level. However, for grade 11, the ELA and Math component were dropped from M-STEP, and the corresponding components from SAT testing program were used starting from Spring 2016. Therefore, for grade 11, only Science and Social Studies building level achievement is a two-year average, the Reading-Writing (the component in correspondence to ELA from SAT) and Math are the 2016 building average.

Subject	Grade	PPT	CBT
	4	3735	20943
Science	7	4418	21223
	11	5240	20302
	5	3688	20972
Social Studies	8	4452	21018
	11	5231	20355

Table 1.1. N-Counts for CBT and PPT per Subject/Grade Combination³

(3) Matching Methods

Different matching methods exist in the literature, such as the nearest neighbor matching approach (Stuart, 2010). The optimal matching algorithm is found to be better than the nearest neighbor matching approach (or the greedy algorithm) for pair matching with a large pool of controls (Hansen, 2004). As shown in Table 1.1, there is a huge pool of CBT students in comparison to the PPT students at each subject/grade combination. Therefore, the optimal matching algorithm was used. Specifically, the R package OPTMATCH (Hansen & Klopfer, 2006) was used to conduct pair matching based on the logit estimated propensity scores per subject/grade combination.

(4) Assessing the Matching Quality

When judging matching quality, we examined individual covariate (at student level) using either a Chi-square test or a *t*-test, in addition to the overall balance test reported in the R package RItools (Bowers, Fredrickson, & Hansen, 2010). The overall balance check used in RItools tests balance on all linear combinations of the covariates in the propensity score model (Hansen & Bowers, 2008). We found that only Science Grade 7 showed significant result for the overall balance check at $\alpha = 0.05$ level. We found, however, that manipulating the functional form of the propensity score model does not help with the overall balance test for Science Grade 7. Nevertheless, for all subject/grade combinations, no individual level covariate was found to have significant difference between the two modes at $\alpha = 0.05$ level.

(5) Considering Possible Violation of Ignorable Treatment Assignment

As stated by Rosenbaum and Rubin (1985), propensity score approaches cannot balance unobserved variables. Therefore, if an unobserved variable is significantly related to both the treatment assignment and the outcome but is unmeasured and thus is not included in the

³ We kept all PPT students, but only used CBT students of one form. For Science, since at all grade levels, the form 3 conversion tables were used for PPT form, we used form 3 CBT students as control. For Social Studies, all CBT forms share the same operational items. However, due to too large a sample size of CBT students during the matching step which exhausts the computer memory, we used the CBT form with the largest N-count. Moreover, duplicated records were excluded for both CBT and PPT forms.

propensity score estimation model, the resulting treatment effect estimates would be biased (Stuart, 2010). Different sensitivity analysis approaches have been proposed in the literature (Caliendo & Kopeinig, 2008; Stuart, 2010). According to Rosenbaum (2010), such analyses are conducted by altering the chances of receiving treatment for those units that appear to have similar chances. The examples included in Rosenbaum (2010) all indicated a significant effect being found, and the sensitivity analyses were trying to specify when such an effect becomes non-significant statistically. In our case, however, we hoped to conclude that the two modes are comparable (i.e., that no significant differences can be found between the two modes). Therefore, if a sensitivity analysis is conducted, the direction will be the opposite (i.e., trying to specify when the two modes will show statistically significant differences). We consider such analysis unnecessary here, as we reported out the most similar CBT form conversion tables for the PPT students. Therefore, the worst scenario (with regard to incomparable samples) in our case would be the reported conversion relations. We further discuss this in the Discussion and Conclusion section.

Section 2: Comparability Analyses and Results

This section describes the methods and results for comparability analyses based on the matched samples obtained per subject/grade combination.

Three sets of comparison analyses were conducted and all of them focus on the overall test. First, a multigroup confirmatory factor analysis (MGCFA) using MPLUS (Muthén & Muthén, 2012) was conducted. Second, summed score to Expected *A Posteriori* (EAP) conversion tables from separate calibrations (with the fixed item parameter calibration approach) using flexMIRT (Cai, 2017) were compared. Third, proficient classification of PPT students from different conversion tables were compared. The details of the three sets of analyses and corresponding results are presented below.

2.1 Multigroup Confirmatory Factor Analysis (MGCFA) using MPLUS

For this analysis, three nested models were compared to establish measurement invariance (Schroeders & Wihelm, 2011): configural invariance, strong invariance, and strict invariance. For configural invariance, factor loadings and thresholds are freely estimated but the residual variances are fixed at 1 and factor means are fixed at 0 in both groups. For strong invariance, the factor loadings and thresholds are freed to be equal across the two groups, the residual variances are fixed at 1 for the CBT group but are freed in the PPT group, and the factor means are fixed at 0 in the CBT group but are freed in the PPT group. The only difference between the strict invariance model and the strong invariance model is that the former also fixes the residual variances at 1 in both groups (see Table 2.1 below, which is adapted from Schroeders & Wihelm, 2011).

	0		
Factor	Thresholds	Residual	Factor Means
Loadings		Variances	
(*	*)	Fixed at 1	Fixed at 0
(Fixed	Fixed)	Fixed at 1/*	Fixed at 0/*
(Fixed	Fixed)	Fixed at 1	Fixed at 0/*
	Factor Loadings (* (Fixed (Fixed	FactorThresholdsLoadings(*(**)(FixedFixed)(FixedFixed)	FactorThresholdsResidualLoadingsVariances(**)Fixed at 1(FixedFixed)Fixed at 1/*(FixedFixed)Fixed at 1

Table 2.1. Testing for Measurement Invariance with Categorical Data

Note. From Schroeders & Wihelm (2011). The asterisk (*) indicates that the parameter is freely estimated. Fixed = the parameter dominated in the title of the column is fixed to equity across groups; Fixed at 1 = the residual variances are fixed at 1 in both groups; Fixed at 1/* = the residual variance is fixed at 1 in one group whereas freed in the other group; Fixed at 0 = factor means are fixed at 0 in both groups. Fixed at 0/* = the factor mean is fixed at 0 in one group and freed in the other. Parameters in parentheses need to be varied in tandem.

If strict invariance is established, the observed scores can be considered as interchangeable (Neuman & Baydoun, 1998). If, however, only the strong invariance is established, ability estimates can be considered as comparable when residual item variances can be attributed to random error (Schroeders & Wilhelm, 2011). Same as in Schroeders & Wihelm (2011), here we estimated all models using the default estimator—weighted least squares mean and variance adjusted (WLSMV) estimator with Theta parameterization. Due to problems found with the Chi-square (χ^2) statistics (Chen, 2007; Cheung & Rensvold, 2002), the following fit indices and cutoff criteria were used: the comparative fit index (CFI) \geq 0.95 and the root mean square error of approximation (RMSEA) < 0.05 (Hu & Bentler, 1998) for indicating a good model fit; and a change of \geq -0.010 in CFI and a change of \geq 0.015 in RMSEA (Chen, 2007) for indicating noninvariance for each step of the nested model comparison.

Table 2.2.a.	Testing for	Measurement	Invariance	for Science	Grade 4 (1-Factor	Model)
							,

0			(,
Invariance Type	CFI	RMSEA	ΔCFI	ΔRMSEA
Configural invariance	0.987	0.018		
Strong invariance	0.978	0.023	-0.009	0.005
Strict invariance	0.979	0.022	0.001	-0.001

Table 2.2.b. Testing for Measurement Invariance for Science Grade 7 (1-Factor Model)

Invariance Type	CFI	RMSEA	ΔCFI	ΔRMSEA
Configural invariance	0.991	0.015		
Strong invariance	0.989	0.017	-0.002	0.002
Strict invariance	0.987	0.018	-0.002	0.001

Table 2.2.e. Testing for Wedsarement invariance for Selence Grade II (1 I defor Wodel)								
Invariance Type	CFI	RMSEA	ΔCFI	ΔRMSEA				
Configural invariance	0.996	0.013						
Strong invariance	0.993	0.017	-0.003	0.004				
Strict invariance	0.990	0.019	-0.003	0.002				

Table 2.2.c. Testing for Measurement Invariance for Science Grade 11 (1-Factor Model)

 Table 2.2.d.
 Testing for Measurement Invariance for Social Studies Grade 5 (1-Factor Model)

Invariance Type	CFI	RMSEA	ΔCFI	ΔRMSEA
Configural invariance	0.984	0.012		
Strong invariance	0.978	0.014	-0.006	0.002
Strict invariance	0.975	0.015	-0.003	0.001

Table 2.2.e. Testing for Measurement Invariance for Social Studies Grade 8 (1-Factor Model) Invariance Type CFI RMSEA ΔCFI **ARMSEA** Configural invariance 0.986 0.015 Strong invariance -0.005 0.002 0.981 0.017 Strict invariance 0.978 0.018 -0.003 0.001

 Table 2.2.f.
 Testing for Measurement Invariance for Social Studies Grade 11 (1-Factor Model)

Invariance Type	CFI	RMSEA	ΔCFI	ΔRMSEA
Configural invariance	0.990	0.019		
Strong invariance	0.989	0.020	-0.001	0.001
Strict invariance	0.991	0.018	0.002	-0.002

As shown in Tables 2.2.a.—2.2.f., all three invariance models fit for all subject/grade combinations when using the fit indices of CFI and RMSEA. When using the change of CFI in combination with the change of RMSEA, results are not so clear. When using the change in CFI as the main criterion (as recommended by Chen [2007]), however, only the configural invariance holds.

2.2 Conversion Table Comparison

Based on the above findings, we decided to take a conservative approach: assuming that only configural invariance holds. We thus did separate calibrations for the matched samples to compare their conversion relations. Tables 2.3.a.—2.3.f. present the results for separate calibrations. In addition, the reported conversion tables for PPT forms (i.e., the conversion tables created for the most similar CBT forms) for each subject/grade combination are also included in these tables, as our focus here is to address if it is appropriate to apply the conversion tables established for the most similar CBT form to the PPT form.

Based on the separate calibration results, we did two comparisons: (1) between PPT and matched CBT, and (2) between PPT and the reported results (i.e., the conversion tables from the most similar CBT form). All raw to scale score conversion relations can be found in Tables 2.3.a. to 2.3.f., and the maximum absolute differences between the PPT and the matched CBT, as well as those between the PPT and the reported conversion relations can be found in Table 2.4. As shown in Table 2.4, the maximum absolute difference between the PPT and the matched CBT are much less than the smallest SE found in both calibrations. Same conclusions can be made when the PPT calibration results are compared to the reported results. Test Characteristic Curves comparisons are skipped here as the same information are contained in Tables 2.3.a. to 2.3.f..

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RawScore	PPT_EAP	PPT_SE	CBT_EAP	CBT_SE	Reported_EAP	Reported_SE
0	-3.368	0.384	-3.327	0.397	-3.332	0.396
1	-3.222	0.405	-3.165	0.415	-3.171	0.414
2	-3.063	0.412	-2.993	0.419	-3.000	0.418
3	-2.901	0.407	-2.821	0.411	-2.829	0.411
4	-2.743	0.395	-2.657	0.397	-2.665	0.397
5	-2.593	0.380	-2.503	0.381	-2.512	0.381
6	-2.454	0.365	-2.360	0.366	-2.369	0.366
7	-2.323	0.352	-2.226	0.353	-2.236	0.353
8	-2.200	0.339	-2.100	0.342	-2.110	0.342
9	-2.083	0.329	-1.981	0.333	-1.991	0.333
10	-1.973	0.320	-1.868	0.324	-1.878	0.324
11	-1.867	0.313	-1.759	0.317	-1.770	0.317
12	-1.766	0.306	-1.655	0.311	-1.666	0.311
13	-1.668	0.301	-1.554	0.306	-1.566	0.306
14	-1.573	0.296	-1.457	0.302	-1.468	0.302
15	-1.480	0.293	-1.362	0.298	-1.373	0.298
16	-1.389	0.290	-1.269	0.295	-1.280	0.295
17	-1.300	0.288	-1.177	0.293	-1.189	0.293
18	-1.212	0.287	-1.088	0.291	-1.099	0.291
19	-1.125	0.286	-0.999	0.289	-1.011	0.290
20	-1.039	0.286	-0.911	0.289	-0.923	0.289
21	-0.952	0.286	-0.823	0.288	-0.835	0.289
22	-0.866	0.287	-0.736	0.289	-0.747	0.290
23	-0.779	0.289	-0.649	0.289	-0.660	0.291
24	-0.692	0.291	-0.561	0.291	-0.572	0.292
25	-0.604	0.293	-0.473	0.292	-0.484	0.294
26	-0.516	0.297	-0.384	0.295	-0.394	0.296
27	-0.425	0.300	-0.294	0.297	-0.303	0.299
28	-0.333	0.304	-0.203	0.301	-0.211	0.303
29	-0.240	0.309	-0.110	0.305	-0.117	0.307
30	-0.144	0.314	-0.014	0.310	-0.021	0.312
31	-0.045	0.320	0.083	0.315	0.077	0.318
32	0.057	0.327	0.183	0.321	0.178	0.324
33	0.162	0.334	0.287	0.328	0.283	0.331
34	0.270	0.343	0.394	0.336	0.391	0.339
35	0.384	0.352	0.505	0.344	0.504	0.348
36	0.502	0.362	0.621	0.354	0.621	0.358
37	0.626	0.374	0.742	0.365	0.744	0.369
38	0.756	0.386	0.869	0.377	0.873	0.381
39	0.894	0.400	1.003	0.390	1.009	0.395
40	1.039	0.416	1.145	0.404	1.152	0.409

Table 2.3.a. Conversion Tables for Science Grade 4 Matched Samples

41	1.194	0.433	1.295	0.420	1.304	0.426
42	1.358	0.452	1.456	0.438	1.466	0.443
43	1.534	0.473	1.627	0.457	1.640	0.463
44	1.722	0.496	1.812	0.479	1.826	0.484
45	1.924	0.520	2.011	0.502	2.026	0.507
46	2.139	0.543	2.226	0.525	2.240	0.530
47	2.365	0.563	2.456	0.545	2.468	0.548
48	2.599	0.573	2.694	0.554	2.703	0.556

RawScore	PPT EAP	PPT SE	CBT EAP	CBT SE	Reported EAP	Reported SE
0	-3.224	0.428	-3.204	0 434	-3.210	0.432
1	-3.063	0.442	-3.042	0.446	-3.047	0.445
2	-2 894	0.442	-2 872	0.445	-2 877	0.444
3	-2 727	0.431	-2 703	0.434	-2 708	0.433
4	-2.566	0.431	-2 541	0.434	-2 547	0.435
5	-2.300	0.410	-2 390	0.417	-2 396	0.398
6	-2.410	0.370	-2.370	0.377	-2.350	0.390
7	-2.273	0.366	-2.240	0.361	2.235	0.364
/	-2.144	0.300	-2.110	0.303	2.123	0.304
<u> </u>	-2.020	0.332	-1.992	0.331	-2.000	0.330
9	-1.904	0.340	-1.8/0	0.338	-1.884	0.337
10	-1.794	0.330	-1.700	0.327	-1.//4	0.320
11	-1.690	0.321	-1.001	0.317	-1.670	0.316
12	-1.590	0.313	-1.561	0.308	-1.5/1	0.308
13	-1.494	0.306	-1.466	0.301	-1.476	0.301
14	-1.401	0.300	-1.374	0.295	-1.384	0.294
15	-1.312	0.295	-1.285	0.289	-1.296	0.289
16	-1.224	0.291	-1.199	0.285	-1.210	0.284
17	-1.139	0.288	-1.116	0.281	-1.126	0.280
18	-1.056	0.285	-1.034	0.278	-1.045	0.277
19	-0.974	0.283	-0.953	0.275	-0.965	0.275
20	-0.893	0.281	-0.874	0.273	-0.886	0.273
21	-0.813	0.280	-0.796	0.272	-0.808	0.271
22	-0.734	0.280	-0.719	0.271	-0.730	0.271
23	-0.654	0.280	-0.642	0.270	-0.653	0.270
24	-0.575	0.281	-0.565	0.270	-0.577	0.270
25	-0.496	0.282	-0.489	0.271	-0.500	0.271
26	-0.416	0.284	-0.412	0.272	-0.423	0.272
27	-0.336	0.286	-0.334	0.274	-0.345	0.274
28	-0.255	0.288	-0.256	0.276	-0.267	0.277
29	-0.173	0.291	-0.177	0.279	-0.188	0.279
30	-0.090	0.295	-0.097	0.282	-0.107	0.283
31	-0.005	0.299	-0.015	0.286	-0.025	0.287
32	0.082	0.304	0.068	0.290	0.058	0.292
33	0.171	0.310	0.153	0.295	0.144	0.297
34	0.262	0.316	0.241	0.301	0.232	0.303
35	0.356	0.323	0.331	0.308	0.323	0.310
36	0.452	0.330	0.424	0.315	0.417	0.317
37	0.552	0.339	0.520	0.323	0.514	0.326
38	0.656	0.348	0.620	0.332	0.615	0.335
39	0.764	0.358	0.724	0.342	0.720	0.345
40	0.876	0.368	0.833	0.352	0.829	0.356

Table 2.3.b. Conversion Tables for Science Grade 7 Matched Samples

41	0.993	0.380	0.947	0.364	0.944	0.367
42	1.115	0.392	1.066	0.377	1.064	0.380
43	1.244	0.406	1.191	0.390	1.190	0.394
44	1.378	0.420	1.323	0.405	1.323	0.409
45	1.520	0.436	1.462	0.421	1.464	0.425
46	1.669	0.452	1.609	0.438	1.612	0.442
47	1.827	0.470	1.766	0.456	1.769	0.461
48	1.994	0.488	1.931	0.476	1.936	0.480
49	2.169	0.506	2.107	0.496	2.112	0.500
50	2.354	0.523	2.293	0.515	2.298	0.518
51	2.545	0.536	2.488	0.530	2.493	0.533
52	2.739	0.540	2.687	0.538	2.691	0.541
53	2.927	0.532	2.883	0.534	2.886	0.536

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RawScore	PPT_EAP	PPT_SE	CBT_EAP	CBT_SE	Reported_EAP	Reported_SE
0	-2.864	0.485	-2.870	0.487	-2.888	0.486
1	-2.640	0.472	-2.651	0.475	-2.671	0.476
2	-2.428	0.448	-2.442	0.452	-2.463	0.454
3	-2.236	0.421	-2.249	0.426	-2.271	0.429
4	-2.062	0.397	-2.074	0.402	-2.095	0.405
5	-1.904	0.376	-1.914	0.381	-1.935	0.385
6	-1.759	0.359	-1.767	0.363	-1.787	0.367
7	-1.625	0.344	-1.631	0.348	-1.649	0.352
8	-1.499	0.333	-1.503	0.336	-1.520	0.341
9	-1.380	0.323	-1.382	0.327	-1.398	0.331
10	-1.267	0.316	-1.266	0.319	-1.281	0.324
11	-1.158	0.310	-1.156	0.313	-1.169	0.318
12	-1.053	0.305	-1.049	0.308	-1.061	0.313
13	-0.951	0.302	-0.945	0.305	-0.955	0.311
14	-0.852	0.300	-0.843	0.303	-0.852	0.309
15	-0.754	0.299	-0.743	0.303	-0.750	0.308
16	-0.657	0.298	-0.643	0.303	-0.649	0.308
17	-0.561	0.299	-0.544	0.304	-0.548	0.309
18	-0.465	0.300	-0.445	0.305	-0.447	0.311
19	-0.369	0.302	-0.346	0.308	-0.346	0.314
20	-0.273	0.304	-0.246	0.311	-0.244	0.317
21	-0.175	0.307	-0.144	0.315	-0.141	0.321
22	-0.076	0.311	-0.041	0.319	-0.036	0.326
23	0.024	0.316	0.064	0.325	0.071	0.331
24	0.127	0.321	0.171	0.331	0.180	0.337
25	0.232	0.327	0.282	0.337	0.292	0.344
26	0.341	0.333	0.396	0.345	0.408	0.351
27	0.452	0.341	0.513	0.354	0.528	0.360
28	0.569	0.349	0.636	0.363	0.652	0.369
29	0.689	0.359	0.763	0.374	0.781	0.380
30	0.816	0.370	0.896	0.385	0.915	0.391
31	0.949	0.382	1.036	0.398	1.057	0.404
32	1.090	0.396	1.183	0.412	1.205	0.418
33	1.239	0.411	1.338	0.428	1.362	0.434
34	1.398	0.429	1.504	0.446	1.528	0.451
35	1.569	0.449	1.680	0.465	1.705	0.470
36	1.753	0.471	1.868	0.486	1.893	0.490
37	1.952	0.495	2.069	0.508	2.095	0.512
38	2.168	0.520	2.284	0.530	2.309	0.532
39	2.398	0.543	2.510	0.546	2.534	0.547
40	2.637	0.555	2.741	0.551	2.762	0.550

Table 2.3.c. Conversion Tables for Science Grade 11 Matched Samples

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RawScore	PPT_EAP	PPT_SE	CBT_EAP	CBT_SE	Reported_EAP	Reported_SE
0	-2.944	0.514	-3.005	0.502	-3.048	0.495
1	-2.747	0.520	-2.820	0.511	-2.866	0.507
2	-2.548	0.514	-2.629	0.509	-2.678	0.507
3	-2.355	0.500	-2.440	0.498	-2.491	0.498
4	-2.171	0.483	-2.259	0.483	-2.310	0.485
5	-1.999	0.466	-2.087	0.467	-2.138	0.470
6	-1.836	0.451	-1.925	0.452	-1.975	0.456
7	-1.683	0.437	-1.771	0.438	-1.820	0.443
8	-1.537	0.425	-1.624	0.426	-1.673	0.431
9	-1.398	0.415	-1.485	0.416	-1.533	0.421
10	-1.265	0.405	-1.351	0.406	-1.398	0.413
11	-1.137	0.397	-1.222	0.398	-1.267	0.405
12	-1.013	0.391	-1.098	0.391	-1.142	0.398
13	-0.893	0.385	-0.977	0.386	-1.019	0.393
14	-0.777	0.380	-0.860	0.381	-0.900	0.388
15	-0.663	0.376	-0.745	0.377	-0.783	0.384
16	-0.551	0.373	-0.632	0.373	-0.669	0.381
17	-0.441	0.370	-0.521	0.371	-0.556	0.379
18	-0.332	0.369	-0.412	0.369	-0.445	0.377
19	-0.225	0.368	-0.304	0.368	-0.334	0.376
20	-0.118	0.367	-0.196	0.367	-0.225	0.376
21	-0.011	0.367	-0.089	0.368	-0.115	0.376
22	0.095	0.368	0.018	0.368	-0.006	0.376
23	0.202	0.370	0.126	0.370	0.103	0.378
24	0.309	0.372	0.234	0.372	0.213	0.380
25	0.417	0.374	0.343	0.374	0.324	0.382
26	0.527	0.378	0.452	0.377	0.436	0.385
27	0.637	0.381	0.564	0.381	0.549	0.389
28	0.750	0.386	0.677	0.386	0.664	0.393
29	0.864	0.391	0.792	0.391	0.781	0.398
30	0.981	0.397	0.910	0.397	0.900	0.404
31	1.101	0.403	1.030	0.403	1.022	0.410
32	1.224	0.411	1.154	0.411	1.148	0.417
33	1.351	0.419	1.281	0.419	1.276	0.424
34	1.481	0.428	1.413	0.428	1.409	0.433
35	1.617	0.438	1.549	0.438	1.546	0.442
36	1.757	0.448	1.690	0.448	1.688	0.453
37	1.902	0.460	1.836	0.460	1.835	0.464
38	2.054	0.473	1.989	0.473	1.989	0.476
39	2.212	0.486	2.148	0.486	2.149	0.489
40	2.376	0.498	2.313	0.500	2.315	0.501

Table 2.3.d. Conversion Tables for Social Studies Grade 5 Matched Samples

41	2.545	0.508	2.484	0.511	2.487	0.512
42	2.717	0.514	2.659	0.518	2.663	0.519
43	2.886	0.511	2.832	0.517	2.838	0.517
44	3.047	0.498	2.999	0.507	3.006	0.506
45	3.194	0.476	3.152	0.486	3.161	0.485

Note. PPT_EAP is the EAP theta from the separate PPT calibration, CBT_EAP is the EAP theta from the separate matched CBT calibration, and Reported_EAP is the EAP theta from the most similar CBT form applied to the PPT students for reporting.

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RawScore	PPT_EAP	PPT_SE	CBT_EAP	CBT_SE	Reported_EAP	Reported_SE
0	-2.903	0.510	-2.913	0.509	-2.915	0.505
1	-2.707	0.512	-2.716	0.510	-2.715	0.506
2	-2.511	0.502	-2.519	0.500	-2.516	0.494
3	-2.321	0.485	-2.328	0.482	-2.325	0.476
4	-2.142	0.466	-2.148	0.463	-2.145	0.455
5	-1.973	0.447	-1.980	0.444	-1.978	0.436
6	-1.815	0.430	-1.822	0.427	-1.822	0.418
7	-1.666	0.415	-1.673	0.411	-1.676	0.403
8	-1.526	0.402	-1.534	0.398	-1.538	0.389
9	-1.393	0.390	-1.401	0.386	-1.408	0.377
10	-1.266	0.380	-1.275	0.375	-1.284	0.367
11	-1.144	0.371	-1.154	0.367	-1.165	0.358
12	-1.026	0.364	-1.037	0.359	-1.051	0.351
13	-0.913	0.358	-0.924	0.353	-0.941	0.344
14	-0.802	0.353	-0.815	0.348	-0.834	0.339
15	-0.694	0.349	-0.708	0.343	-0.730	0.335
16	-0.588	0.347	-0.604	0.340	-0.628	0.331
17	-0.483	0.345	-0.501	0.338	-0.527	0.329
18	-0.380	0.344	-0.400	0.336	-0.428	0.328
19	-0.277	0.343	-0.299	0.335	-0.330	0.327
20	-0.175	0.344	-0.199	0.335	-0.232	0.327
21	-0.073	0.345	-0.099	0.336	-0.134	0.328
22	0.030	0.347	0.002	0.338	-0.036	0.329
23	0.134	0.350	0.102	0.340	0.062	0.331
24	0.238	0.354	0.204	0.343	0.162	0.334
25	0.344	0.358	0.307	0.346	0.263	0.338
26	0.452	0.363	0.412	0.351	0.365	0.342
27	0.562	0.369	0.518	0.356	0.469	0.347
28	0.675	0.375	0.627	0.361	0.576	0.353
29	0.790	0.383	0.739	0.368	0.686	0.360
30	0.909	0.391	0.853	0.376	0.799	0.368
31	1.032	0.400	0.972	0.384	0.915	0.376
32	1.158	0.410	1.094	0.393	1.036	0.386
33	1.290	0.421	1.221	0.404	1.161	0.396
34	1.426	0.433	1.354	0.415	1.292	0.408
35	1.568	0.447	1.492	0.428	1.429	0.421
36	1.716	0.461	1.636	0.441	1.572	0.435
37	1.871	0.476	1.787	0.456	1.723	0.450
38	2.032	0.492	1.946	0.472	1.882	0.467
39	2.200	0.507	2.113	0.489	2.049	0.484
40	2.373	0.522	2.287	0.505	2.225	0.502

Table 2.3.e. Conversion Tables for Social Studies Grade 8 Matched Samples

41	2.548	0.532	2.468	0.519	2.408	0.518
42	2.723	0.535	2.652	0.527	2.595	0.529
43	2.889	0.529	2.834	0.527	2.783	0.531
44	3.042	0.513	3.007	0.514	2.962	0.521

Note. PPT_EAP is the EAP theta from the separate PPT calibration, CBT_EAP is the EAP theta from the separate matched CBT calibration, and Reported_EAP is the EAP theta from the most similar CBT form applied to the PPT students for reporting.

RawScore	PPT_EAP	PPT_SE	CBT_EAP	CBT_SE	Reported_EAP	Reported_SE
0	-2.666	0.508	-2.766	0.508	-2.791	0.509
1	-2.437	0.486	-2.547	0.494	-2.575	0.498
2	-2.220	0.454	-2.335	0.469	-2.365	0.475
3	-2.022	0.422	-2.138	0.440	-2.168	0.448
4	-1.844	0.392	-1.958	0.413	-1.986	0.422
5	-1.684	0.366	-1.793	0.389	-1.820	0.399
6	-1.538	0.344	-1.642	0.368	-1.666	0.379
7	-1.405	0.327	-1.502	0.350	-1.524	0.361
8	-1.283	0.312	-1.372	0.336	-1.391	0.347
9	-1.169	0.300	-1.249	0.323	-1.265	0.335
10	-1.061	0.290	-1.134	0.313	-1.146	0.325
11	-0.959	0.282	-1.023	0.305	-1.032	0.317
12	-0.862	0.276	-0.918	0.299	-0.923	0.310
13	-0.768	0.272	-0.815	0.294	-0.817	0.306
14	-0.676	0.268	-0.716	0.291	-0.714	0.302
15	-0.587	0.266	-0.618	0.289	-0.613	0.300
16	-0.498	0.265	-0.522	0.288	-0.513	0.299
17	-0.411	0.265	-0.426	0.288	-0.414	0.299
18	-0.324	0.265	-0.331	0.289	-0.315	0.301
19	-0.236	0.267	-0.235	0.291	-0.215	0.303
20	-0.148	0.269	-0.138	0.294	-0.115	0.306
21	-0.058	0.273	-0.040	0.297	-0.014	0.309
22	0.033	0.277	0.059	0.302	0.090	0.314
23	0.127	0.282	0.161	0.307	0.196	0.320
24	0.223	0.289	0.266	0.314	0.304	0.327
25	0.323	0.296	0.375	0.322	0.417	0.335
26	0.427	0.305	0.487	0.331	0.533	0.344
27	0.537	0.315	0.605	0.341	0.654	0.354
28	0.652	0.327	0.728	0.352	0.781	0.365
29	0.774	0.340	0.858	0.365	0.915	0.378
30	0.905	0.356	0.995	0.380	1.056	0.393
31	1.046	0.374	1.142	0.396	1.206	0.409
32	1.198	0.394	1.299	0.415	1.365	0.428
33	1.364	0.418	1.468	0.436	1.537	0.448
34	1.546	0.445	1.652	0.460	1.722	0.471
35	1.746	0.475	1.852	0.486	1.921	0.495
36	1.965	0.507	2.069	0.514	2.138	0.521
37	2.203	0.538	2.306	0.540	2.370	0.544
38	2.453	0.561	2.558	0.559	2.613	0.558

Table 2.3.f. Conversion Tables for Social Studies Grade 11 Matched Samples

Subject Crede		Maximum Abs	Minimum SE			
Subject Grade	CBT vs. PPT	Reported vs. PPT	PPT	CBT	Reported	
	4	0.132	0.123	0.286	0.288	0.289
Science 7 11	7	0.063	0.058	0.280	0.270	0.270
	11	0.117	0.143	0.298	0.303	0.308
Social	5	0.089	0.139	0.367	0.367	0.376
Studies 8 11	8	0.087	0.151	0.343	0.335	0.327
	11	0.116	0.176	0.265	0.288	0.299

Table 2.4. Comparison of PPT Calibrations from Matched CBT Calibrations and the Reported

Note. CBT here indicate matched CBT data.

2.3 Comparison of Cut Scores and Proficiency Classification

We also compared classification results. The yellow cells in Tables 2.3.a. to 2.3.f. are the minimum theta values at or above the threshold for each performance levels. Among the three cuts, i.e., Not Proficient vs. Partially Proficient, Partially Proficient vs. Proficient, Proficient vs. Advanced, we care most about the Partially Proficient vs. Proficient cut. We found that for Science grade 5, the raw score point associated with Partially Proficient vs. Proficient cut is the same for all three conversion relations, and there is one raw score point difference for all other subject/grade combinations for the Partially Proficient vs. Proficient cut. Since only PPT students would be affected if they were reported based on the separate calibration results, only PPT students were examined for possible impact for different classification with regard to Partially Proficient vs. Proficient vs. Proficient vs. Proficient vs. Partially Proficient vs. Proficient vs. Proficient vs. Proficient vs. Proficient vs. Proficient vs. Since only PPT students were examined for possible impact for different classification with regard to Partially Proficient vs. Proficient. Table 2.5. reports the number of students who would be classified differently.

Subject	Grada	PPT Students Impacted		
Subject	Glade	Number	% of All PPT	
	4	105	2.81	
Science	7	125	2.83	
	11	178	3.40	
	5	0	0	
Social Studies	8	132	2.96	
	11	154	2.94	

Table 2.5. Partially Proficient vs. Proficient Classification Impact for PPT Students

According to Table 2.5., a small portion of students (ranging from 2.81% to 3.40% per subject/grade combination) would be classified differently. Moreover, based on Tables 2.3.a. to 2.3.f., for Science grade 4 and grade 11, as well as Social Studies grade 11, the reported conversion tables classified correspondingly impacted students (reported in Table 2.5.) as Proficient, while the PPT only separate calibration would classify them as Partially Proficient; for Science grade 7 and Social Studies grade 8, the impacted students were reported as Partially Proficient, but would be classified as Proficient if the separate calibration for PPT students were used.

Section 3: Discussion and Conclusion

In this mode comparison study, we used propensity score matching to form a matched set from the most similar CBT form to each PPT form per subject/grade combination. We have mentioned before that for a proper use of propensity score matching, we need to consider the possible violation of ignorable treatment assignment. We also mentioned that a sensitivity analysis will best address this consideration. However, we decided to skip this analysis, as we are only considering if it is appropriate to apply the most similar CBT form conversion table to the PPT students. The reported relation is thus the possible worst scenario. Based on the conversion table comparison, we found similar conclusions between the PPT and the matched CBT, as well as between the PPT and the reported.

We checked the marginal reliabilities reported from the flexMIRT separate calibration results and found them to be similar across the two modes per subject/grade combination. Specifically, for Science at all grade levels, and for Social Studies at grade 5, with two decimal points, they are the same across the two modes, and there is only 0.01 difference between the modes on the reliabilities for Social Studies at grades 8 and 11. Such similar internal consistency level between the two modes is to be expected, based on the reported results from the MGCFA analysis mentioned in Section 2.1.

Some states reported t-test results, and we consider this inappropriate here. First, when sample size is large, t-test usually ends up with significant results. Second, t-test only compares the means, and at most also tests the equality of variance assumption. However, for mode comparison at test score level, a better way would be to conduct the Kolmogorov-Smirnov test as described in Zeng et al. (2015) to compare the equality of distributions. We skipped this analysis here, not only because we are handling large sample size (as all these statistical tests would observe the tendency of significant results with large sample size), but also because our focus here is not on mode comparison per se, but rather to address the question if the application of the most similar CBT form conversion table to the PPT form is appropriate, i.e., if non-significant conversion relation in statistical sense could be established between separate calibrations of the PPT and the matched CBT. In addition, we compared the separate PPT calibration results to the reported conversion tables used for PPT.

Based on the comparisons reported in Section 2 above, we concluded that to apply the most similar CBT form conversion tables to the PPT form is acceptable.

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Appendix F: Michigan Assessment System Participant Groups

This appendix provides more details on the stake holders and participants involved in the Michigan Assessment System.

Appendix F.1 Michigan Educators

Michigan educators (including classroom teachers from K–12 and higher education, curriculum specialists, and administrators) play a vital role in all phases of the test development process. Committees of Michigan educators review the test specifications and provide advice on the model or structure for assessing each content area. They also work to ensure that test content and question types align closely with best practices in classroom instruction.

Appendix F.2 Technical Advisory Committee

Michigan's Technical Advisory Committee (TAC) serves as an advisory body to MDE. The TAC provides recommendations on technical aspects of large-scale assessments, including item development, test construction, administration procedures, scoring and equating methodologies, and standard-setting workshops. The TAC also provides guidance on other technical matters, such as practices not already described in the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 2014), and continues to provide advice and consultation on the implementation of new assessments and adherence to the federal requirements set forth by the Every Student Succeeds Act. Table E-1 can be referenced for TAC member information.

Name	Position	Organization
Dr. Mark Reckase, Chair	Distinguished Professor of Measurement and Quantitative Methods (retired)	Michigan State University
Dr. Damian Betebenner	Senior Associate	National Center for the Improvement of Educational Assessment
Dr. Gregory J. Cizek	Distinguished Professor of Educational Measurement and Evaluation	University of North Carolina, Chapel Hill
Dr. George E. Engelhard, Jr.	Professor Emeritus of Educational Measurement and Policy	University of Georgia
Dr. Christine Carrino Gorowara	Interim Director	Delaware Center for Teacher Education, University of Delaware
Dr. Joseph Martineau	Senior Associate	National Center for the Improvement of Educational Assessment
Dr. Dave Treder	Coordinator of Research, Evaluation, and Assessment	Genesee Intermediate School District, Flint, Michigan

Table F-1. Technical Advisory Co

Appendix F.3 Michigan's Division of Educator, Student, and School Supports (DESSS) Advisory Committee

The DESSS Advisory Committee meets quarterly to provide input, ideas, expert advice, and/or recommendations to the MDE and DESSS on matters related to assessment and accountability, professional preparation, educator evaluations, assessment policy, and related communications to the field. The committee also meets to keep its respective organizations abreast of changes to the above areas that will affect Michigan's schools and students. The committee comprises representatives from educational agencies, organizations, and representatives from both two-year and four-year colleges and universities across the state. Table F-2 shows the members of the DESSS Advisory Committee.

Last Name	First Name	Organization
Anand	Johanna	Michigan Department of Education/Low Incidence Outreach
Arnswald	Jennifer	Michigan Science Teachers Association
Berry	Kathy	Michigan Council of Teachers of Mathematics
Clingman	Cindy	Michigan Reading Association
Сох	Mary	Michigan Council of Teachers of English
Czerwinski	Harvey	Michigan Education Research Association
Dewsbury-White	Kathryn	Michigan Assessment Consortium
DeYoung	Ann	Michigan Elementary and Middle School Principals Association
Flukes	Jonathan	Michigan Education Research Association
Gordon	Casey	MI Council of Teachers of English to Speakers of Other Languages
Greer	Doug	Oakland Area Intermediate School District
Kher	Neelam	Michigan State University
Koekkoek	Matthew	Michigan Association of Administrators of Special Education
Langdon	Thomas	Michigan Association of School Administrators
Mastie	Marge	Washtenaw Intermediate School District - Retired
McIntyre	Rebecca	Michigan Association of Administrators of Special Education
Miller	Kathy	Michigan School Facilitators Network
Trout	Kelly	Ingham Intermediate School District
Vespremi	Stacy	Michigan Association of State and Federal Programs Specialists
Vorenkamp	Ellen	Wayne Regional Educational Services Agency
Zdeb	Wendy	Michigan Association of Secondary School Principals
Substitutes		
McGoran	Holly	Michigan Science Teachers Association
Musial	Joe	Wayne Regional Educational Services Agency
Ripmaster	Colin	Michigan Association of Secondary School Principals
Taraskiewicz	Cindy	Wayne Regional Educational Services Agency

Table F-2. Division of Educator, Student, and School Supports Advisory Committee

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