

**Missouri Assessment Program-Alternate (MAP-A)
Standard Setting Report**

**June 5, 6, & 7, 2006
Columbia, Missouri**



Prepared by Measured Progress for the
Missouri Department of Elementary and Secondary Education

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Overview of Standard Setting Meetings

The standard setting meetings held to establish cut scores for the Missouri Assessment Program-Alternate (MAP-A) in Communication Arts and Mathematics for grade spans 3-5, 6-8, and 11 (Communication Arts) and 3-5, 6-8, and 10 (Mathematics) were held on Monday, Tuesday, and Wednesday, June 5-7, 2006.

The standard setting method implemented for all grade spans and both content areas was the Body of Work method. An overview of the method is described below. All panels followed the same procedures.

To help ensure consistency of procedures between panels, each panel was led through the standard setting process by trained facilitators from Measured Progress.

Overview of Process

This section of the report provides an overview of the standard setting process as it was implemented for the Missouri Assessment Program-Alternate. The process was divided into three stages, each with several constituent tasks.

- ❖ Tasks completed prior to the standard setting meeting
 - Creation of achievement levels and writing of draft achievement level descriptors
 - Preparation of materials for panelists
 - Preparation of presentation materials
 - Preparation of Instructions for Group Facilitators document
 - Preparation of systems and materials for analysis during the meeting
 - Selection of panelists
- ❖ Tasks completed during the standard setting meeting
 - Orientation
 - Review of draft achievement level descriptors
 - Round 1 and 2 judgments for middle cut
 - Round 1 and 2 judgments for lower cut
 - Round 1 and 2 judgments for upper cut
 - Tabulation of Round 2 results
 - Round 3 judgments for all three cuts
 - Recommended achievement level descriptor language
 - Evaluation
- ❖ Tasks completed after the standard setting meeting
 - Analysis and review of panelists' feedback
 - Preparation of Round 3 cut scores
 - Preparation of smoothed cut scores
 - Summarization of statistical results
 - Preparation of standard setting report

Tasks Completed Prior to the Standard Setting Meeting

Creation of achievement levels and writing of draft achievement level descriptors

The achievement level descriptors provided panelists a draft description of the knowledge, skills and abilities that students are expected to be able to display to be classified into each achievement level (*Below Basic, Basic, Proficient, and Advanced*). These draft achievement level descriptors were the basis of the judgments made by the panelists. The draft descriptors are provided in Appendix A of this document.

Preparation of materials for panelists

The following materials were assembled for presentation to the panelists at the standard setting meeting:

- Meeting agenda
- Confidentiality agreement
- Draft achievement level descriptors
- Sets of MAP-As
- Rating forms
- Evaluation form

Preparation of presentation materials

The PowerPoint presentations used in the opening session were prepared prior to the meeting. Copies of the PowerPoint slides are included in Appendix B of this document.

Preparation of Instructions for Group Facilitators document

A document, “General Instructions for Group Facilitators: MAP-A Standard Setting,” was created for the group facilitators to refer to as they worked through the process. A copy of these instructions is included in Appendix C of this document.

Preparation of systems and materials for analysis during the meeting

The programming of all analyses to be conducted during the standard setting meeting was completed and thoroughly tested prior to the standard setting meeting.

Selection of panelists

Panelists were selected prior to the standard setting meeting by the Assessment Resource Center (ARC) in cooperation with DESE. The design called for a total of 90 panelists to be selected for the standard setting, 15 per panel. Each selected panel was to be composed of 9 teachers (6 special education and 3 content), 3 school administrators, higher education personnel and/or stakeholders from interest groups related to significant disabilities, and 3 parents of students with significant cognitive disabilities. Panelists were also selected to achieve a balance of gender, race/ethnicity, and geographic location. The actual makeup of the panels varied from

the design slightly. Overall each panel was composed of 3 to 6 special educators, 1 to 3 content educators, 4 to 6 school administrators, higher education personnel and/or stakeholders from interest groups related to significant disabilities and 2 to 3 parents of students with significant cognitive disabilities.

Panelist absence slightly affected the actual number of panelists in each group. Table 1 below shows the number of panelists in each grade span and content area who contributed final ratings.

Table 1: Number of Panelists Contributing to Final Standard Setting Results

Subject	Grade Span	Number of Panelists
Communication Arts	3-5	13
Communication Arts	6-8	13
Communication Arts	11	13
Mathematics	3-5	13
Mathematics	6-8	14
Mathematics	10	14

Tasks Completed During the Standard Setting Meeting

Orientation

The standard setting meeting began with a general orientation session that was attended by all panelists. The purpose of the orientation was to provide some background information on the MAP-A, provide an introduction to the issues of standard setting, and explain the activities that would occur during the standard setting meeting. At the conclusion of the opening session the floor was opened to questions about the standard setting process.

After the large-group session, the panelists assembled into their grade span/content groups. Each group was in a separate room.

Review of draft achievement level descriptors

The panelists started by reviewing the draft achievement level descriptors. This step of the process was very important; it was designed to ensure that the panelists thoroughly understood the knowledge, skills and abilities that students needed to demonstrate in order to be classified as *Basic*, *Proficient*, and *Advanced*. The panelists began by reviewing the descriptors individually. Once they completed their individual reviews, they discussed each level as a group, starting with *Basic*. In this step, the panelists provided clarification for each level and came to consensus as to the characteristics that define a student at each achievement level. For each level, a bulleted list of characteristics that distinguish students at that level was written on chart paper and posted in the room for the panelists to refer to as they completed their ratings. The bulleted lists from each of the different panels are provided in Appendix D of this document.

Overview of rating process

The ultimate goal of the rating process was for each panelist to classify each MAP-A into one of the four achievement levels. MAP-As were ordered from lowest raw score to highest; the lowest raw score in any panel was 3, while the highest was 48. Table 2 below shows the number of MAP-As presented to each panel.

Table 2: Number of MAP-As Presented to Each Panel

Subject	Grade Span	Number of MAP-As Presented
Communication Arts	3-5	35
Communication Arts	6-8	36
Communication Arts	11	34
Mathematics	3-5	35
Mathematics	6-8	35
Mathematics	10	30

Because of the large quantity of assessment materials the panelists had to familiarize themselves with, the three rounds of ratings were further broken down into smaller tasks. Panelists started with the middle cut, between *Basic* and *Proficient*, by sorting the MAP-As into two piles: those they felt represented below proficient performance and those they felt represented performance that was proficient or above. Once the MAP-As were sorted into two piles, they then sorted each of those piles into two piles, starting with the subset of MAP-As they had classified as below proficient. Each of these sorting tasks was done in two rounds; after the two rounds were completed for all three cuts, a final round was completed.

Round 1 and 2 judgments for middle cut

The panelists began the rating process by individually reviewing the set of MAP-As, beginning with #1 (the lowest scoring MAP-A in the set), then every fifth MAP-A after that up through the highest scoring MAP-A. This step enabled them to familiarize themselves with MAP-As across the full range of performance represented and also to narrow in on the set of MAP-As they felt was near the cut between *Basic* and *Proficient*. Once they identified this subset of MAP-As, they would then review all of them in the subset, sorting them into the two piles. All the MAP-As below their chosen subset would go into the below proficient pile, and all those above would go into the proficient or above pile. In this way, they separated the MAP-As into two piles without having to review all of them in this first step. Panelists were told that they would have multiple opportunities later in the process to move MAP-As between piles.

The separation of MAP-As into below proficient and proficient or above piles was done in two rounds: in the first round, panelists worked individually, without consulting with their colleagues. In the second round, the panelists discussed their initial placement of the MAP-As as a group, then made any adjustments necessary to their initial ratings. The goal was to allow each panelist the opportunity to explain why he or she sorted a particular MAP-A into one pile or the other. Panelists were encouraged both to share their rationale and to listen to the points made by their colleagues. Facilitators emphasized that the goal of the group discussion was not to come

to consensus or to pressure anyone into changing their ratings, but rather to allow panelists to benefit from the different points of view and experiences represented among their colleagues. At the end of each round, each panelist recorded his/her ratings on the Middle Cut Rating Form. Copies of all rating forms are included in Appendix E of this document.

Round 1 and 2 judgments for lower cut

Once Rounds 1 and 2 were completed for the middle cut, the panelists set the pile of MAP-As they had categorized as proficient or above aside, and began reviewing the full set of MAP-As in their below proficient pile. The task was to separate that pile of MAP-As into two sub-groups, representing the lower two achievement levels: *Below Basic* and *Basic*. As with the middle cut, the task for the lower cut was done in two rounds and, after each round, each panelist's categorizations were recorded on the Lower Cut Rating Form.

Round 1 and 2 judgments for upper cut

In this step, the panelists separated the pile of proficient or above MAP-As into an additional two piles representing the upper two achievement levels: *Proficient* and *Advanced*. As with the previous two cuts, the ratings were done in two rounds and each panelist recorded his/her judgments on the Upper Cut Rating Form.

Tabulation of Round 2 results

Once Rounds 1 and 2 were completed for all three cuts, the Round 2 results were compiled by Measured Progress staff and feedback was provided to the panelists. The feedback consisted of two types of information: first, panelists were told where the cut points were based on the room average ratings from Round 2. The room average cut points were calculated using logistic regression. Second, the panelists were given impact data indicating the percentage of students that would fall into each of the four achievement levels based on the Round 2 average cut points. Panelists were instructed to take this information into consideration in their Round 3 discussions and their final ratings.

Round 3 judgments for all three cuts

The panelists then had another round of discussion in which, once again, each panelist shared his/her rationale for how he/she rated the MAP-As. In this round, panelists looked at all three cuts together. They were encouraged to consider the results more holistically, and to take into consideration the impact data as well as the categorization of each individual MAP-A. The panelists were encouraged to use the impact data as an additional piece of evidence, but were told that they should not make their judgments based solely on the percentages of students classified into each level. After the Round 3 discussions were completed, each panelist recorded his/her final ratings on the Round 3 Rating Form. Panelist ratings for both Rounds 2 and 3 are presented in Appendix F of this document.

Recommended achievement level descriptor language

After recommended cut scores were established for the grade spans, the panelists revisited

the draft achievement level descriptors. The panelists were asked to make overall language recommendations for the draft achievement level descriptors, as well as to recommend language that might be added to the descriptors to create grade level achievement level descriptors. The panelists were encouraged to use “parent- and teacher-friendly” language in their recommendations. The language recommendations are provided in Appendix D of this document.

Evaluation

Upon completion of the rating process, panelists anonymously completed an evaluation form. The results of the evaluation are presented in Appendix G of this document.

Tasks Completed After the Standard Setting Meeting.

Upon conclusion of the standard setting meeting, several important tasks were completed. These tasks centered on reviewing the standard setting meeting and addressing anomalies that may have occurred in the process or in the results.

Analysis and review of panelists’ feedback

Upon completion of the evaluation forms, panelists’ responses were reviewed. This review did not reveal any anomalies in the standard setting process or indicate any reason that a particular panelist’s data should not be incorporated in obtaining the final results. It appeared that all panelists understood the rating task and attended to it appropriately.

Preparation of Round 3 cut scores

Based on the Round 3 ratings, each panelist’s cut scores were calculated using logistic regression, and those cuts were averaged across panelists to obtain the Round 3 cut scores from the standard setting. These cuts are presented in Tables 3 and 4 below. Also shown in Tables 3 and 4 are the percentages of students who would fall into each achievement level based on those cuts. See the columns labeled “Round 3” for Round 3 cuts and percentages.

Preparation of smoothed cut scores

The cut points obtained from Round 3 of the standard setting were also smoothed across grade spans to find a final set of cut points that would be cohesive among the grade spans in each content area. Since all panels used very similar draft achievement level descriptors in determining the cut points, the panels could be treated as if they represented several replications of the standard setting task. These final cut points, and the associated impact data for each grade and content area, are shown in Tables 3 and 4, in the columns labeled “Smoothed”.

Table 3: Communication Arts Cuts

Grade Span	Achievement Level	Round 3		Smoothed	
		RS Range	% in Level	RS Range	% in Level
3-5	BB	3-19	2.2	3-19	2.2
	B	20-33	15.9	20-33	15.9
	P	34-45	57.9	34-44	49.2
	A	46-48	24.1	45-48	32.7
6-8	BB	3-25	6.9	3-23	5
	B	26-36	23.8	24-35	21
	P	37-45	46.4	36-45	51.1
	A	46-48	22.9	46-48	22.9
11	BB	3-26	12.4	3-26	12.4
	B	27-37	22.1	27-37	22.1
	P	38-45	45.5	38-44	38.4
	A	46-48	20.1	45-48	27.2

Table 4: Mathematics Cuts

Grade Span	Achievement Level	Round 3		Smoothed	
		RS Range	% in Level	RS Range	% in Level
3-5	BB	3-20	3.9	3-20	3.9
	B	21-31	13	21-31	13
	P	32-44	50.4	32-44	50.4
	A	45-48	32.7	45-48	32.7
6-8	BB	3-26	9.2	3-22	6
	B	27-33	15.1	23-32	15.5
	P	34-45	55.4	33-44	51.5
	A	46-48	20.3	45-48	26.9
10	BB	3-24	8.6	3-25	9.2
	B	25-33	18.7	26-33	18.1
	P	34-45	51.2	34-45	51.2
	A	46-48	21.5	46-48	21.5

Summarization of statistical results

As a supplement to the statistics provided in Tables 3 and 4, a summary of the results was produced. Table H.1 in Appendix H displays descriptive statistics of Round 2 and 3 raw score cuts for Communication Arts; Table H.2 in Appendix H displays this information for Mathematics. The tables give the following information by panel and cut point:

- Number of panelists contributing ratings
- Mean of panelists' individual raw score cuts (rounded to two decimal places)
- Standard deviation of panelists' individual raw score cuts (rounded to two decimal places)

As the mean of the panelists' individual cuts was taken as that round's raw score cut for the entire panel, it represents precise information about where each panel's cut was placed between two raw score points. The standard deviation of the panelists' individual cuts provides

information about the spread of individual raw score cuts within a panel.

Additionally, the statistical summary in Appendix H includes a graphical representation of the impact data corresponding to Round 3 and smoothed cuts. Figures H.1 and H.2 show the percentage of students falling below each proposed cut; Round 3 cuts are denoted by individual points, whereas smoothed cuts are joined by line segments.

Preparation of standard setting report

This report documents the procedures and results of the standard setting meetings in the establishment of achievement standards for the Missouri Assessment Program-Alternate.

Appendix A

Draft Achievement Level Descriptors

MAP-A Draft Achievement Level Descriptors

Grades 3-5	Mathematics
Below Basic	Student has a minimal /pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Basic	Student has a limited /an emerging understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Proficient	Student has some/a basic / a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is connected to the strands and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.
Advanced	Student has a high level of /strong / solid understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.

MAP-A Draft Achievement Level Descriptors

Grades 3-5	Communication Arts
Below Basic	Student has a minimal understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Basic	Student has a limited understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Proficient	Student has some understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.
Advanced	Student has a high level of understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.

MAP-A Draft Achievement Level Descriptors

Grades 6-8	Mathematics
Below Basic	Student has a minimal /pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Basic	Student has a limited /an emerging understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Proficient	Student has some/a basic / a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is connected to the strands and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Advanced	Student has a high level of /strong / solid understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.

MAP-A Draft Achievement Level Descriptors

Grades 6-8	Communication Arts
Below Basic	Student has a minimal understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Basic	Student has a limited understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Proficient	Student has some understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.
Advanced	Student has a high level of understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.

MAP-A Draft Achievement Level Descriptors

Grade 10	Mathematics
Below Basic	Student has a minimal /pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Basic	Student has a limited /an emerging /understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Proficient	Student has some/a basic / a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is connected to the strands and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Advanced	Student has a high level of /strong / solid understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.

MAP-A Draft Achievement Level Descriptors

Grade 11	Communication Arts
Below Basic	Student has a minimal understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Basic	Student has a limited understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Proficient	Student has some understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.
Advanced	Student has a high level of understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.

Appendix B

Opening Session PowerPoint Presentations

Slide 1

Missouri Assessment Program
Alternate (MAP-A) Standard Setting

The logo for the Missouri Assessment Program Alternate (MAP-A) is a circular emblem. It features a central figure of a person standing on a globe, with a torch held in their right hand. The text "MAP-A" is written in a semi-circle above the figure, and "Missouri" is written in a semi-circle below it. The entire emblem is enclosed in a circular border.

Slide 2

Who are MAP-A students?

To be eligible for the MAP-A, a student with a disability must meet the following criteria:

- The student has a demonstrated significant **cognitive** disability and adaptive behavioral skills. Therefore, the student has difficulty acquiring new skills, and skills must be taught in very small steps.
- The student does not keep pace with peers, even with the majority of students in special education, with respect to the total number of skills acquired.

A small version of the MAP-A logo is located in the bottom left corner of the slide.

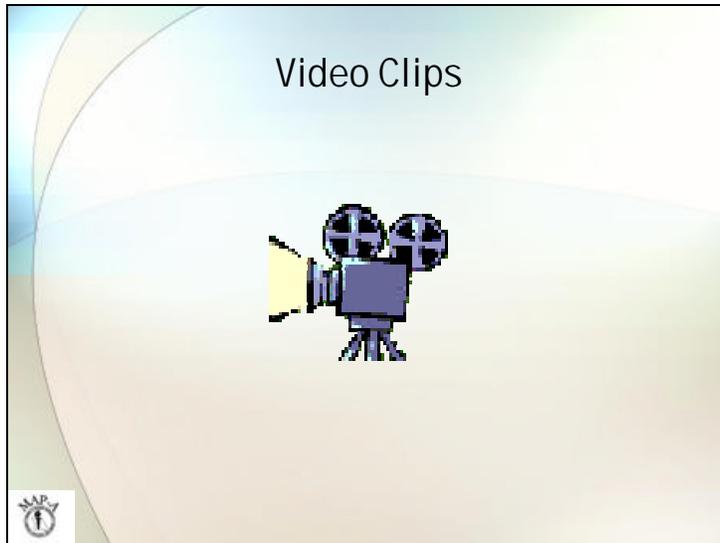
Slide 3

Who are MAP-A students?

- The student's educational program centers on the application of **essential** skills to the Missouri Show-Me Standards.
- The IEP team, as documented in the IEP, does not recommend participation in the MAP subject areas or taking the MAP with accommodations.
- The student's inability to participate in the MAP subject area assessments is not primarily the result of excessive absences; visual or auditory disabilities; or social, cultural, language, or economic differences.

A small version of the MAP-A logo is located in the bottom left corner of the slide.

Slide 4



Slide 5

A presentation slide with a light blue and yellow background. The title "What is the MAP-A?" is centered at the top. Below the title, the text "The MAP-A is" is followed by a bulleted list of three points. In the bottom left corner, there is a small circular logo with the letters "MAP" and a stylized figure.

What is the MAP-A?

The MAP-A is

- **required by federal law;**
- **designed only for students with significant cognitive disabilities who meet age and participation criteria;**
- **administered at the same grade levels as students participating in Missouri's general assessment;**

Slide 6

A presentation slide with a light blue and yellow background. The title "What is the MAP-A?" is centered at the top. Below the title, there is a bulleted list of two points. In the bottom left corner, there is a small circular logo with the letters "MAP" and a stylized figure.

What is the MAP-A?

- **scored using the MAP-A Scoring Rubric to obtain student performance levels which are then used to determine reportable scores; and**
- **reflective of input from an instructional team, which may include teachers, physical therapists, speech therapists, occupational therapists, paraprofessionals, job coaches, parents or guardians, and the student, if appropriate.**

Slide 7

What is assessed?

Content Area	Title of Standard	Grade Focus
Mathematics	•Numbers and Operations	Required at all grade levels (3-8, 11)
	•Algebraic Relationships <i>OR</i> •Geometric and Spatial Relationships	Required for elementary (3-5)
	•Data and Probability	Required for middle school (6-8)
	•Measurement	Required for high school (10)
Communication Arts	•Reading: Develop and apply skills and strategies to the reading process	Required at all grade levels (3-8, 11)
	•Writing: Compose well-developed text using standard English conventions	Required for elementary (3-5)
	•Writing: Apply a writing process in composing text or write effectively in various forms and types of writing	Required for middle school and high school (6-8, 11)

Slide 8

What is the design?

Mathematics											
Strand 1 (NO)						Strand 2 (by grade span)					
API 1			API 2			API 1			API 2		
Data Sheet			Data Sheet			Data Sheet			Data Sheet		
CP 1	CP 2	CP 3	CP 1	CP 2	CP 3	CP 1	CP 2	CP 3	CP 1	CP 2	CP 3
WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS

Communication Arts											
Strand 1 (RD and/or RP)						Strand 2 (by grade span)					
API 1			API 2			API 1			API 2		
Data Sheet			Data Sheet			Data Sheet			Data Sheet		
CP 1	CP 2	CP 3	CP 1	CP 2	CP 3	CP 1	CP 2	CP 3	CP 1	CP 2	CP 3
WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS

Slide 9

What are the MAP-A requirements?

Content	Description
Entry/Data Summary Sheet	Serves as a record of student performance on each API assessed. The student's score for Level of Accuracy and Level of Independence for each API will be determined based on the percentages recorded on the Entry/Data Summary Sheet. A separate sheet is required for each API assessed.
Student Work Samples	Provides documentation of student work for each API assessed in each of three collection periods. Student Work Samples should demonstrate the application of the API in a standards-based activity. You may show evidence of student work by: <ul style="list-style-type: none"> •collecting actual student work using the <i>Tangible Work Product Label</i> form (use this method when a student completes an actual work product such as worksheets, drawings, writings, journal entries, or projects); or •observing the student and recording his or her performance using the <i>Written Teacher Observation and Anecdotal Record Form</i> (use this method when there is no tangible work product to submit).

Slide 10

Student: _____ Jennifer _____ Grade: 3 4 5 6 **7** 8 10

Entry/Data Summary Sheet Mathematics Strand 1: Numbers & Operations (NO)

API #: _____ **API Description:** Use numerals 1-9 to represent the cardinal value (how many) of a collection.
NO 1.10

Task/Activity Description: Jennifer will number a collection using the numbers 1–9. Jennifer does a variety of tasks to work on numbering collections up to 9. She assists with attendance, counts out sets of papers for the classroom, uses the computer program for practice, and matches sets to numbers at work stations in the classroom.

	Collection Period 1 January 3 – January 27					Collection Period 2 January 30 – February 17				Collection Period 3 February 20 – March 17			
Date	1/4	1/10	1/16	1/20	1/26	2/1	2/6	2/10	2/17	2/22	2/28	3/9	3/16
Data Type	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
Accuracy %	100	90	85	100	100	100	80	80	100	100	100	100	90
Independence %	20	40	40	20	20	20	40	30	60	20	40	30	30
Average % for Collection Period	Accuracy: 95 Independence: 28					Accuracy: 90 Independence: 38				Accuracy: 98 Independence: 30			

Data Type Key:
WS= Student Work Sample (Tangible Student Work Product OR Teacher Observation/Anecdotal Record Form)
DC= Data Collection System

	API Entry Average
Level of Accuracy	94
Level of Independence	32

Slide 11

MAP-A Teacher Observation & Anecdotal Record Form
(Student Work Sample)

Student Name: Jennifer **Date:** 1/20/06

Content Area (Circle One): Mathematics Communication Arts **Strand** (Circle One): 1 of 2

API: NO 1.10 **Description:** Uses 1-9 numerals to represent the cardinal value (how many) of a collection.

Student's Interaction in Task/Activity: (Write a brief description of the task/activity. Be sure to include information on how the student participated in the activity.)
Jennifer took the classroom attendance today using the attendance board and bingo markers. Mrs. Johnson called off each student's name. Each student present would hold up his/her hand when called. When Jennifer found the student she placed a magnetic bingo chip next to a picture of the student. Once all of the students present were identified, Jennifer numbered them using magnetic numbers. She selected the number that comes next. Mrs. Johnson made sure Jennifer had the correct number before going on to the next one. Finally, Jennifer delivered the correct attendance number to me.

Evaluation of Student's Performance: (Describe the student's actual performance. Include information on how the percentages were determined for both Accuracy and Independence.)
Jennifer did very well in identifying which classmates were present using the magnetic bingo chips. She struggled with the identification of numbers. There are 5 students in the class. Jennifer correctly identified the number 1 independently. She needed verbal and physical prompts for the rest of the numbers. Jennifer gets to do attendance 2 days a week. The 2 days are added together so that we have a total of 10 (5 each day). On Monday, 1/16, Jennifer was able to identify the number 1 independently and on Friday, 1/20, she identified the 1 independently as well. For the week, her accuracy was 100%, with independence being 2/10 for 20%.

Level of Accuracy **Level of Independence**
100 % 20 %

Slide 12

MAP-A Teacher Observation & Anecdotal Record Form
(Student Work Sample)

Student Name: Jennifer **Date:** 2/17/06

Content Area (Circle One): Mathematics Communication Arts **Strand** (Circle One): 1 of 2

API: NO 1.10 **Description:** Uses 1-9 numerals to represent the cardinal value (how many) of a collection.

Student's Interaction in Task/Activity: (Write a brief description of the task/activity. Be sure to include information on how the student participated in the activity.)
Jennifer took the classroom attendance today using the attendance board and bingo markers. Mrs. Johnson called off each student's name. Each student present would hold up his/her hand when called. When Jennifer found the student she placed a magnetic bingo chip next to a picture of the student. Once all of the students present were identified, Jennifer numbered them using magnetic numbers. She selected the number that comes next. Mrs. Johnson made sure Jennifer had the correct number before going on to the next one. Finally, Jennifer delivered the correct attendance number to me.

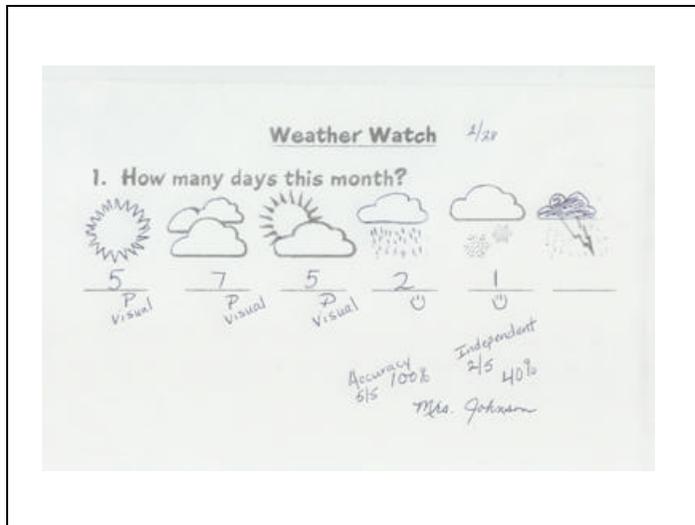
Evaluation of Student's Performance: (Describe the student's actual performance. Include information on how the percentages were determined for both Accuracy and Independence.)
Jennifer did very well in identifying which classmates were present using the magnetic bingo chips. She is showing great improvement with the identification of the numerals. There are 5 students in the class. Jennifer correctly identified the numbers 1, 2, and 3 independently. She needed verbal and physical prompts for the 4 and 5. Jennifer gets to do attendance 2 days a week. The 2 days are added together so that we have a total of 10 (5 each day). On Monday, 1/16, Jennifer was able to identify the number 1, 2, and 3 independently and on Friday, 1/20, she identified the 1, 2, and 3 independently as well. For the week, her accuracy was 100%, with independence being 6/10 for 60%.

Level of Accuracy **Level of Independence**
100 % 60 %

Slide 13

MAP-A Tangible Work Product Label (Attach to actual student work product)			
Student Name: Jennifer			Date: 2/28/06
Content Area (Circle One): <u>Mathematics</u>	Communication Arts	Strand (Circle One) <u>1</u> or 2	
API: NO 1.10	Description: Use 1-9 numerals to represent the cardinal value (how many) of a collection.		
Task/Activity Description: (Write a brief description of the task/activity that resulted in the attached work product.) At the end of each month, the class completes a weather watch activity using the weather graph for the month. Jennifer works with her 1:1 aide to complete this activity. Together they count the number of times we had each type of weather. Jennifer then chooses the magnetic number to represent that type of weather and places it on the weather picture. The assistant then writes the number for Jennifer on the worksheet. The attached weather sheet is for the month of February.			
Evaluation of Student's Performance: (Describe the student's actual performance. Include information on how the percentages were determined for both Accuracy and Independence.) Jennifer and her assistant started by counting how many sunny days there were in February. Jennifer then had to find the numeral to match that weather. She needed visual cueing. The activity continued in the same manner until they had counted and numbered all 5 types of weather. Jennifer had 100% accuracy and needed visual cueing for 3 of the 5 types of weather (40% independent).			
Level of Accuracy		Level of Independence	
—100%		—40%	

Slide 14



Slide 15

What does the MAP-A Assess?

- The MAP-A documents student learning directly connected to the Show-Me Standards through the Alternate Grade-Level Expectations (Alternate-GLEs) for students who are MAP-A eligible. The assessment has three criteria:
 - Level of Accuracy
 - Level of Independence
 - Connection to the Standards



Slide 16

MAP-A Rubric

SCORE	4	3	2	1	No Score
Level of Accuracy	Student performance of skills "based on Alternate Performance Indicators" demonstrates a high level of understanding of concepts. 76-100% Accuracy	Student performance of skills "based on Alternate Performance Indicators" demonstrates some understanding of concepts. 51-75% Accuracy	Student performance of skills "based on Alternate Performance Indicators" demonstrates a limited understanding of concepts. 26-50% Accuracy	Student performance of skills "based on Alternate Performance Indicators" demonstrates a minimal understanding of concepts. 0-25% Accuracy	Entry contains insufficient information to determine a score.
Level of Independence	Student requires minimal verbal, visual, and/or physical assistance to demonstrate skills and concepts. 76-100% Independence	Student requires some verbal, visual, and/or physical assistance to demonstrate skills and concepts. 51-75% Independence	Student requires frequent verbal, visual, and/or physical assistance to demonstrate skills and concepts. 26-50% Independence	Student requires extensive verbal, visual, and/or physical assistance to demonstrate skills and concepts. 0-25% Independence	Entry contains insufficient information to determine a score.
Connection to the Standards	There is evidence of applying the Alternate Performance Indicator in three standards-based activities, one per collection period.	There is evidence of applying the Alternate Performance Indicator in at least two standards-based activities, two out of three collection periods.	There is evidence of applying the Alternate Performance Indicator in at least one standards-based activity, one out of three collection periods.	There is some evidence of a connection to the Alternate Performance Indicator.	There is insufficient evidence of a connection to the Alternate Performance Indicator.

Slide 17

Who scored the MAP-As?

- **The Assessment Resource Center hired scorers in Missouri.**
- **Measured Progress provided training.**
- **DESE staff were present at the training and available as needed to answer questions.**

Slide 1

Missouri Assessment Program - Alternate

Setting Performance Standards

Measured Progress

Slide 2

Purpose of Standard Setting Meeting

- Provide data to establish the following cut scores for Communication Arts and Math, Grade Spans 3-5 and 6-8, as well as for Math Grade 10 and Communication Arts Grade 11:
 - *Below Basic* ← Cut Score
 - *Basic* ← Cut Score
 - *Proficient* ← Cut Score
 - *Advanced*

2

Measured Progress

Slide 3

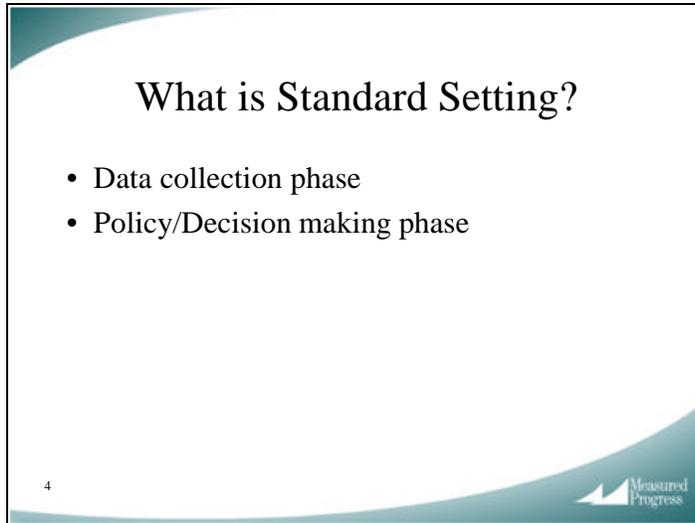
What is Standard Setting?

- Set of activities that result in the determination of threshold or cut scores on an assessment
- We are trying to answer the question:
 - How much is enough?

3

Measured Progress

Slide 4



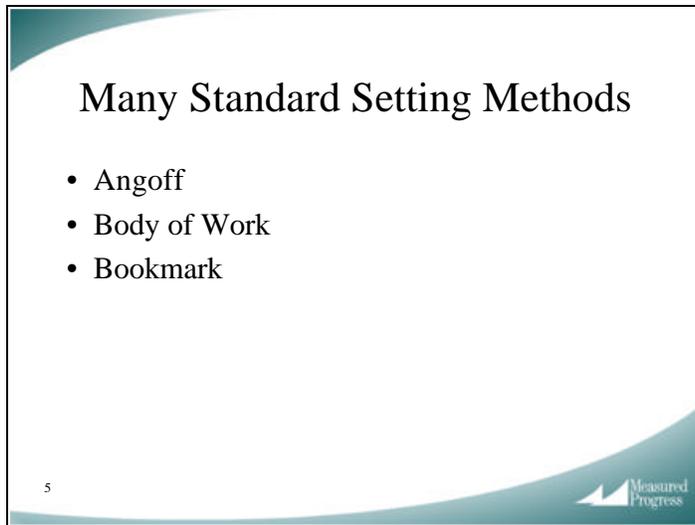
What is Standard Setting?

- Data collection phase
- Policy/Decision making phase

4



Slide 5



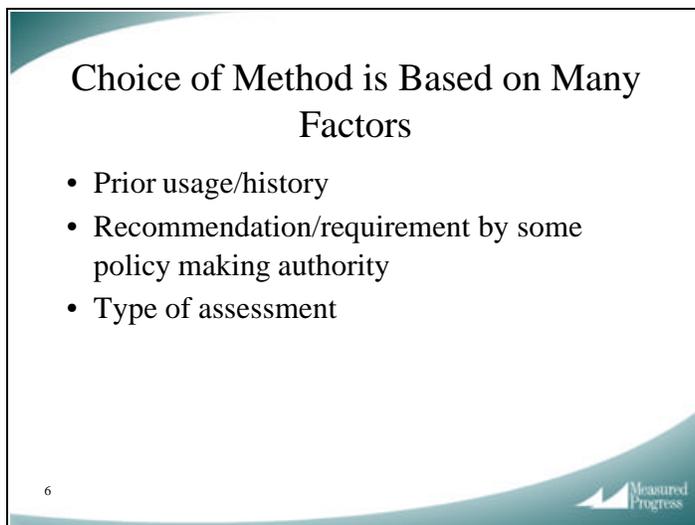
Many Standard Setting Methods

- Angoff
- Body of Work
- Bookmark

5



Slide 6



Choice of Method is Based on Many Factors

- Prior usage/history
- Recommendation/requirement by some policy making authority
- Type of assessment

6



Slide 7

Body of Work Method

- Is especially useful for assessments that consist primarily or entirely of constructed-response items
- Has been used successfully by Measured Progress in the past
- Allows panelists to use samples of actual student work to make their determinations

 Measured Progress

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Slide 8

Body of Work Method

- You will be basing your decisions on a set of student MAP-As
- MAP-As cover the range of possible scores and are presented in order from lowest to highest total score

 Measured Progress

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Slide 9

What is your role in this process?

- To classify each MAP-A into the achievement level in which you feel it belongs:
 - *Below Basic*
 - *Basic*
 - *Proficient*
 - *Advanced*

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Slide 10

What is your role in this process?

- You may disagree about the order of the MAP-As; that's fine
- You will categorize the MAP-As as you see fit, whether your ratings agree with the order or not
- However, it is not your job to rescore the MAP-As: you need to stay focused on the task at hand

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Slide 11

Body of Work Method

- Prior to beginning the process of rating the MAP-As, you will:
 - thoroughly review and discuss the Achievement Level Descriptions
 - create bulleted lists on chart paper of the knowledge, skills and abilities that a student must demonstrate in order to be categorized into a given achievement level.
- It is critical that panelists come to a common understanding of the ALDs.

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Slide 12

Overview

- Middle Cut Ratings
 - Round 1 (individual)
 - Round 2 (group)
- Lower Cut Ratings
 - Round 1 (individual)
 - Round 2 (group)
- Upper Cut Ratings
 - Round 1 (individual)
 - Round 2 (group)
- Round 3 Ratings (all three cuts; group)

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Slide 13

Steps for Body of Work Method

- Round 1:
 - Panelists individually review the MAP-As
 - There is no discussion with colleagues
 - Panelists make their first set of ratings
- Round 2:
 - All panelists in the group will discuss the Round 1 ratings
 - Panelists make their second set of ratings

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Slide 14

Steps for Body of Work Method

- Rounds 1 and 2 will be completed first for the middle cut (below proficient vs. proficient or above)
- Rounds 1 and 2 will next be completed for the lower cut (*Below Basic* vs. *Basic*)
- Finally, Rounds 1 and 2 will be completed for the upper cut (*Proficient* vs. *Advanced*)

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Slide 15

Steps for Body of Work Method

- Once Rounds 1 and 2 have been completed for all three cuts, Round 3 occurs:
 - Group discussion of the Round 2 ratings
 - Look at all three cuts simultaneously: more holistic approach
 - You will also be given impact data, indicating the percentage of students who would fall into each category according to the Round 2 ratings
 - Final round of ratings

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Slide 16

Steps for Body of Work Method

- Note:
 - Your group does not need to come to consensus about how the MAP-As should be categorized
 - You may change your ratings as a result of the discussions, or you may not
 - You should be open-minded when listening to your colleagues' rationales for their ratings
 - However: we want your individual best judgment in each round of rating

16



Slide 17

Steps for Body of Work Method

- Note also:
 - This session is intended to be an overview
 - Your room facilitator will give you lots more details and will guide you through the process step by step

17



Slide 18

Any Questions about the Body of Work Procedure?



Slide 19

A presentation slide with a white background and a teal gradient at the top and bottom. The title "What Next?" is centered at the top. Below it is a bulleted list. The slide number "19" is in the bottom left, and the "Measured Progress" logo is in the bottom right.

What Next?

- Some meeting logistics
- After this session, you will break into grade-span/content area groups

19

Measured Progress

Slide 20

A presentation slide with a white background and a teal gradient at the top and bottom. The title "What Next?" is centered at the top. Below it is a bulleted list. The slide number "20" is in the bottom left, and the "Measured Progress" logo is in the bottom right.

What Next?

- Once in your breakout room, you will:
 - Review the Achievement Level Descriptions and create your bulleted lists
 - Complete Rounds 1 & 2 for the middle cut
 - Complete Rounds 1 & 2 for the lower cut
 - Complete Rounds 1 & 2 for the upper cut
 - Complete Round 3 for all three cuts

20

Measured Progress

Slide 21

A presentation slide with a white background and a teal gradient at the top and bottom. The title "What Next?" is centered at the top. Below it is a bulleted list. The slide number "21" is in the bottom left, and the "Measured Progress" logo is in the bottom right.

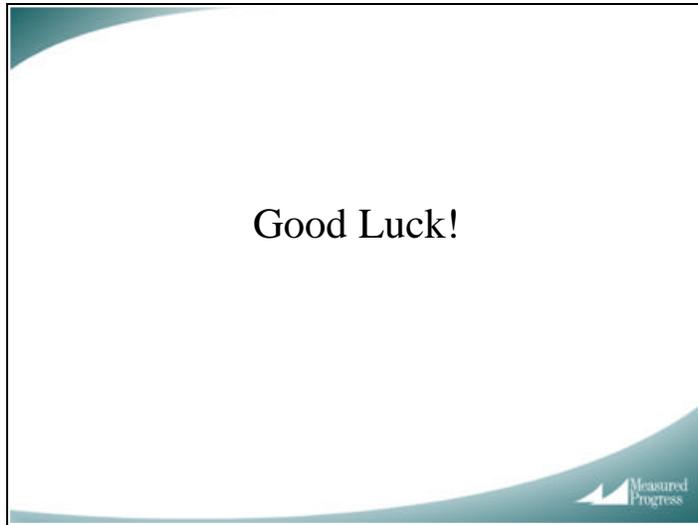
What Next?

- Provide grade-level feedback on the Achievement Level Descriptions
- As the final step, we will ask you to complete an evaluation of the standard setting process
 - Your honest feedback is important for us, both for improving future standard settings, and for evaluating the results of this one

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Slide 22



Appendix C

Instructions for Group Facilitators

GENERAL INSTRUCTIONS FOR GROUP FACILITATORS MAP-A STANDARD SETTING

June 5, 6 & 7, 2006

Introductions

- 1) Welcome group, introduce yourself (name, affiliation, a little selected background information).
- 2) Have each participant introduce him/herself.

Discuss Achievement Level Descriptions

Overview: In order to establish a thorough understanding of the expected performance of students on the test, panelists must have a clear understanding of:

- 1) the definition of the four achievement levels, and
- 2) what the key characteristics are that distinguish students in adjacent achievement level categories.

The purpose of this activity is for the panelists to come to consensus about what characterizes students in each of the four achievement level categories. This activity is critical since the ratings panelists will be making in Rounds 1 through 3 will be based on these understandings.

Activities:

1. Introduce task. In this activity they will:
 - a. Individually review the Achievement Level Descriptions;
 - b. discuss Descriptions as a group; and
 - c. generate bulleted lists that describe the main characteristics that define students in each achievement level category.
2. Have panelists individually review all Achievement Level Descriptions. They can make notes if they like. The goal here is for the panelists to come to a common understanding of what it means to be in each achievement level. It is not unusual for panelists to disagree with the descriptions they will see; almost certainly there will be some panelists who will want to change them. However, the task at hand is for panelists to have a common understanding of what knowledge, skills, and abilities are described by each Achievement Level Description. Panelists will have an opportunity to provide feedback and suggestions for edits to the Descriptors after the standard setting activities are completed.
3. After individually reviewing the Descriptions, have the panelists discuss each one as a group, starting with *Basic*, and provide clarification. Assign a note taker to capture the points made and any questions. The purpose of this is to have a collegial discussion in which to bring up/clarify any issues or questions that any individual may have and to reach consensus on an understanding of the description.

4. Once the discussion is complete for each achievement level, using chart paper, create a bulleted list for each level, specifying the characteristics that best describe students in that level. The panelists want to answer the question, what characteristics must a student demonstrate in order to be classified in the *Basic* category. Or, put another way, what are the most important characteristics that distinguish a *Below Basic* student from a student in the *Basic* category. They will then repeat this process for the *Proficient* and *Advanced* categories.

Ratings: Middle Cut

Overview of Middle Cut Ratings: The panelists will begin the rating process by separating the MAP-As into two piles, those that represent performance that is below proficient (*Below Basic* or *Basic*) vs. proficient or above (*Proficient* or *Advanced*). The ratings will be done in two rounds. The first round will be done individually, without consulting with their colleagues. In the second round, they will have an opportunity to discuss their Round 1 ratings with the other panelists.

Middle Cut Round 1: The first step in the process will be for the panelists to individually review the MAP-As, beginning with #1, and then every fifth MAP-A after that (i.e., #6, #11, etc.). Once they have narrowed in on the MAP-As they feel are near the cut point between below proficient and proficient or above, they will review all the MAP-As in that range. As they proceed through the MAP-As, the panelists should ask themselves whether the knowledge, skills and abilities demonstrated in each are consistent with performance that is below proficient, or proficient or above. At the end of Round 1, each panelist will complete the Round 1 section of the Middle Cut Rating Form, indicating the level they feel each MAP-A should be categorized into.

Activities:

1. Make sure panelists have the following materials:
 - a. Set of MAP-As
 - b. Achievement Level Descriptions
 - c. Rating Form for the Middle Cut
2. Orient panelists to the set of MAP-As. Explain that the MAP-As are ordered by the student's total raw score, which was obtained using a straight forward summing of the 4 content entries (3 domain scores summed = content entry score.) Make sure they know that, if they disagree with the order of the MAP-As, they are free to categorize them as they feel appropriate, regardless of their ordering. For example, if they feel that MAP-A #15 represents performance that is proficient or above, but #16 (which has a higher total score) represents below proficient performance, they should categorize them as such.
3. Provide an overview of Round 1. Emphasize the following:
 - a. The primary purpose is to separate the MAP-As into two piles.
 - b. Panelists will be working individually in this round, without consulting with their colleagues. They will have opportunities in Rounds 2 and 3 to discuss their categorizations and make changes.
 - c. Each panelist needs to base his/her judgments on his/her experience with the content, understanding of students, and the Achievement Level Descriptions.

- d. If panelists are struggling with categorizing a particular MAP-A, they should use their best judgment and move on. They will have an opportunity to revise their categorizations.
 - e. Panelists should feel free to take notes if there are particular points about a certain MAP-A and how they think it should be categorized that they would like to discuss in Round 2.
4. Go over the rating form with panelists:
 - a. Have panelists write their ID number on the rating form. The ID number is on their name tags.
 - b. Lead panelists through a step-by-step demonstration of how to fill in the rating form.
 - c. There should be one and only one checkmark in each row for each round of ratings.
 5. Give panelists an opportunity to ask questions about their task in Round 1, then tell them they may begin.
 6. Have panelists individually review the MAP-As, beginning with #1, and then every fifth one after that (i.e., #6, #11, etc.), ending with the last MAP-A. It is important that panelists continue all the way through the last MAP-A so they have a good sense of the entire range of performance represented. As they are reviewing the MAP-As, the panelists should keep in mind the Achievement Level Descriptions. They should consider the knowledge, skills and abilities demonstrated by each and how they relate to the definitions of the achievement levels. As they complete each MAP-A, have them place it into one of two piles: below proficient, vs. proficient or above.
 7. Once they have narrowed in on the MAP-As they feel are near the cut point between below proficient and proficient or above, they will review all the MAP-As in that range, again placing each in the appropriate pile. **Note:** the panelists will not be reviewing all of the MAP-As at this time; this is done intentionally, to break the work into more manageable pieces.
 8. Panelists may want to take notes as they work.
 9. Once panelists have finished sorting the MAP-As, they will fill in the Round 1 section of the Middle Cut Rating Form.
 10. As panelists complete the task, ask them to carefully inspect their rating forms to ensure they are filled out properly.
 - a. The ID number must be filled in.
 - b. Each MAP-A must be assigned to one and only one achievement level.
 - c. Although the MAP-As are presented in order from lowest- to highest-scoring, the panelists' category assignments do not need to be in strictly increasing order.

Middle Cut Round 2: In Round 2, the panelists will discuss their categorizations of the MAP-As into the two levels as a large group. After the discussions are complete, the panelists will do their second round of ratings.

Activities:

1. Make sure panelists have the following materials:
 - a. Set of MAP-As
 - b. Achievement Level Descriptions
 - c. Rating Form for the Middle Cut
2. Using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each category (below proficient vs. proficient or above).
3. Beginning with the first MAP-A for which there was disagreement as to its categorization, the panelists will discuss their rationale for categorizing it as they did.
 - a. Panelists only need to discuss those MAP-As for which there was disagreement as to how they should be categorized.
 - b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
 - c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
 - d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
 - e. As they finish the discussion for each MAP-A, each panelist should once again place it into the appropriate pile.

Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions than the rest of the group. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

4. Once the discussions have been completed, each panelist will complete the Round 2 section of the Middle Cut Rating Form, again indicating the level they feel each MAP-A should be categorized into.

Ratings: Lower Cut

Overview of Lower Cut Ratings: Once Rounds 1 and 2 have been completed for the middle cut, the process will be repeated for the lower cut. The panelists will set aside the pile of MAP-As that they have classified as proficient or above, and work only with the MAP-As they feel are below proficient. Working their way through each MAP-A in the pile, the panelists will subdivide them into two new piles: *Below Basic* and *Basic*. As with the middle cut ratings, in the first round of ratings, panelists will work individually and, in the second round, they will have an opportunity to discuss their categorizations before making their second round ratings.

Lower Cut Round 1: The process here will be basically the same as for the middle cut, except that they will be subdividing the MAP-As they categorized as below proficient into two achievement levels: *Below Basic* and *Basic*. They will individually work their way through each of the MAP-As they categorized as below proficient. As they proceed through the MAP-As, the panelists should ask themselves whether the knowledge, skills and abilities demonstrated in each are consistent with performance that is *Below Basic*, or *Basic*. At the end of Round 1, each panelist will complete the Round 1 section of the Lower Cut Rating Form, indicating the level they feel each MAP-A should be categorized into.

Activities:

1. Make sure panelists have the following materials:
 - a. Set of MAP-As
 - b. Achievement Level Descriptions
 - c. Rating Form for the Middle Cut
 - d. Rating Form for the Lower Cut
 - e. Rating Form for the Upper Cut (they will be preparing it for when they get to the upper cut ratings)
2. Ask the panelists to transfer their ratings in the Round 2: Proficient or Above column of the Middle Cut Rating Form into the Proficient or Above columns of the Lower Cut Rating Form; the ratings should be entered into the Proficient or Above column for both rounds. Once they have done that, have them transfer their Below Proficient ratings onto the Upper Cut Rating Form, again placing them in the Below Proficient columns for both rounds.
3. Have the panelists place the pile of MAP-As they categorized as above proficient, as well as the Upper Cut Rating Form, aside, where they will be out of their way.
4. Have the panelists individually review each MAP-A in their below proficient pile; they will have reviewed some of them while doing their middle cut ratings, but they should revisit those briefly to refresh their memory.
5. As they are reviewing the MAP-As, the panelists should keep in mind the Achievement Level Descriptions. They should consider the knowledge, skills and abilities demonstrated by each and how they relate to the definitions of the achievement levels. As they complete each MAP-A, have them place it into one of two piles: *Below Basic* or *Basic*.
6. **Note:** Because the panelists will be reviewing some MAP-As for the first time in this step, it is possible that they may feel that one or more should have been placed in the proficient or above pile in the previous step. Tell them that, in that case, they should categorize it as *Basic* for the time being, but make a note on it indicating that it needs to be recategorized. They will have an opportunity in Round 3 to change any of the categorizations; for now, however, they may not move MAP-As out of the below proficient category.

7. Once panelists have finished sorting the MAP-As, they will fill in the Round 1 section of the Lower Cut Rating Form.
8. As panelists complete the task, ask them to carefully inspect their rating forms to ensure they are filled out properly.
 - a. The ID number must be filled in.
 - b. Each MAP-A must be assigned to one and only one achievement level.
 - c. Although the MAP-As are presented in order from lowest- to highest-scoring, the panelists' category assignments do not need to be in strictly increasing order.

Lower Cut Round 2: In Round 2, the panelists will discuss their categorizations of the MAP-As into the two levels as a large group. After the discussions are complete, the panelists will do their second round of ratings.

Activities:

1. Make sure panelists have the following materials:
 - a. Set of MAP-As
 - b. Achievement Level Descriptions
 - c. Rating Form for the Lower Cut
2. Using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each category. In this case, you will be including three categories: *Below Basic*, *Basic*, and proficient or above. Even though the panelists will be confining their discussions to the *Below Basic/Basic* cut, including all three categories on the chart paper should help minimize any confusion.
3. Beginning with the first MAP-A for which there was disagreement as to whether it should be categorized as *Below Basic* or *Basic*, the panelists will discuss their rationale for categorizing it as they did.
 - a. Panelists only need to discuss those MAP-As for which there was disagreement as to whether it should be categorized as *Below Basic* or *Basic*.
 - b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
 - c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
 - d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
 - e. As they finish the discussion for each MAP-A, each panelist should once again place it into the appropriate pile.

Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions than the rest of the group. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

4. Once the discussions have been completed, each panelist will complete the Round 2 section of the Lower Cut Rating Form, again indicating the level they feel each MAP-A should be categorized into.

Ratings: Upper Cut

Overview of Upper Cut Ratings: Once Rounds 1 and 2 have been completed for the middle and lower cuts, the process will be repeated one more time for the upper cut. The panelists will set aside the two piles of MAP-As that they have classified as either *Below Basic* or *Basic*, and work only with the MAP-As they feel are proficient or above. Working their way through each MAP-A in the pile, the panelists will subdivide them into two new piles: *Proficient* and *Advanced*. As with the middle and lower cut ratings, in the first round of ratings, panelists will work individually and, in the second round, they will have an opportunity to discuss their categorizations before making their second round ratings.

Upper Cut Round 1: The process here will be basically the same as for the lower cut, except that they will be subdividing the MAP-As they categorized as proficient or above into two achievement levels: *Proficient* and *Advanced*. They will individually work their way through each of the MAP-As they categorized as proficient or above. As they proceed through the MAP-As, the panelists should ask themselves whether the knowledge, skills and abilities demonstrated in each are consistent with performance that is *Proficient*, or *Advanced*. At the end of Round 1, each panelist will complete the Round 1 section of the Upper Cut Rating Form, indicating the level they feel each MAP-A should be categorized into.

Activities:

1. Make sure panelists have the following materials:
 - a. Set of MAP-As
 - b. Achievement Level Descriptions
 - c. Rating Form for the Upper Cut
2. Have the panelists place the piles of MAP-As they categorized as *Below Basic* or *Basic* aside, where they will be out of their way.
3. Have the panelists individually review each MAP-A in their proficient or above pile; they will have reviewed some of them while doing their middle cut ratings, but they should revisit those briefly to refresh their memory.
4. As they are reviewing the MAP-As, the panelists should keep in mind the Achievement Level Descriptions. They should consider the knowledge, skills and abilities demonstrated by each and how they relate to the definitions of the achievement levels. As they complete each MAP-A, have them place it into one of two piles: *Proficient* or *Advanced*.
5. **Note:** Because the panelists will be reviewing some MAP-As for the first time in this step, it is possible that they may feel that one or more should have been placed in the below proficient pile in the first step. Tell them that, in that case, they should categorize

it as *Proficient* for the time being, but make a note on it indicating that it needs to be recategorized. They will have an opportunity in Round 3 to change any of the categorizations; for now, however, they may not move MAP-As out of the proficient or above category.

6. Once panelists have finished sorting the MAP-As, they will fill in the Round 1 section of the Upper Cut Rating Form.
7. As panelists complete the task, ask them to carefully inspect their rating forms to ensure they are filled out properly.
 - a. The ID number must be filled in.
 - b. Each MAP-A must be assigned to one and only one achievement level.
 - c. Although the MAP-As are presented in order from lowest- to highest-scoring, the panelists' category assignments do not need to be in strictly increasing order.

Upper Cut Round 2: In Round 2, the panelists will discuss their categorizations of the MAP-As into the two levels as a large group. After the discussions are complete, the panelists will do their second round of ratings.

Activities:

1. Make sure panelists have the following materials:
 - a. Set of MAP-As
 - b. Achievement Level Descriptions
 - c. Rating Form for the Upper Cut
2. Using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each category. In this case, you will be including three categories: below proficient, *Proficient*, and *Advanced*. Even though the panelists will be confining their discussions to the *Proficient/Advanced* cut, including all three categories on the chart paper should help minimize any confusion.
3. Beginning with the first MAP-A for which there was disagreement as to whether it should be categorized as *Proficient* or *Advanced*, the panelists will discuss their rationale for categorizing it as they did.
 - a. Panelists only need to discuss those MAP-As for which there was disagreement as to whether they should be categorized as *Proficient* or *Advanced*.
 - b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
 - c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
 - d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
 - e. As they finish the discussion for each MAP-A, each panelist should once again place it into the appropriate pile.

Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions than the rest of the group. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

4. Once the discussions have been completed, each panelist will complete the Round 2 section of the Upper Cut Rating Form, again indicating the level they feel each MAP-A should be categorized into.

Tabulation of Round 2 Results

Once Round 2 has been completed for all three cuts, the data will be analyzed and information will be provided that the panelists will use for Round 3.

Ratings: Round 3 – All Cuts

Overview of Round 3: The primary purpose of Round 3 is to ask the panelists to discuss their Round 2 ratings for all three cuts as a whole group and to revise their ratings on the basis of that discussion. They will discuss their ratings in the context of the ratings made by other members of the group. Prior to beginning the Round 3 discussions, using a show of hands, indicate on a piece of chart paper how many panelists assigned each MAP-A to each of the four achievement level categories. Also show on the chart paper which MAP-As will be assigned to each level according to the group average cut points from Round 2 (you will be provided this information by the data analysis team). Focusing on the MAP-As that are near the cut points, the panelists will discuss why they categorized each MAP-A as they did, making sure that all different points of view are included in the discussion.

To aid with the discussion, panelists will also be given impact data, showing the approximate percentage of students who would be classified into each achievement level category based on the room average cut points from Round 2.

This round will be similar to the Round 2 discussions, except that the panelists will be discussing all three cut points. The purpose of this round is to look at the results holistically, rather than each cut individually. Therefore, the panelists should start the discussions with the lower cut, then proceed to the middle cut and, finally, the upper cut.

Once panelists have reviewed and discussed the Round 2 categorizations, they will be given the opportunity to change or revise their Round 2 ratings.

Activities:

1. Make sure panelists have the following materials:
 - a. The Round 3 rating form
 - b. Set of MAP-As
 - c. Achievement Level Descriptions

2. Have panelists write their ID number on the rating form.
3. Provide an overview of Round 3. Paraphrase the following:
 - a. As in Rounds 1 and 2, the primary purpose is to categorize each MAP-A into the achievement level category where you feel it belongs.
 - b. Each panelist needs to base his/her judgments on his/her experience with the content area, understanding of students, discussions with other panelists and the knowledge, skills, and abilities required to answer each item.
 - c. In addition to the categorization of each MAP-A, panelists should also consider the impact data: based on their knowledge of students and the Achievement Level Descriptions, do the percentages of students falling into each category make sense? If they do, that is an indication that the cut points are placed appropriately. If they don't, the panelists may want to consider revising their ratings.
4. Review the feedback information with the panelists.
 - a. Show the panelists how the MAP-As will be categorized based on the room average Round 2 cut point placements.
 - b. Go over the impact data, explaining that if the Round 2 ratings were to be used to set the final cut points, these are the approximate percentages of students who would be classified into each achievement level category.
5. Give panelists an opportunity to ask questions about the feedback information or about the task for Round 3.
6. Beginning with the MAP-As for which there was disagreement as to whether they should be categorized as *Below Basic* or *Basic*, the panelists should begin discussing the categorization of the MAP-As according to the Round 2 ratings. Once they have completed the discussion for the lower cut, they will then proceed to the middle cut and then, finally, to the upper cut.
 - a. Panelists only need to discuss those MAP-As for which there was disagreement as to how they should be categorized.
 - b. Panelists should be encouraged to listen to their colleagues as well as express their own points of view.
 - c. If the panelists hear a logic/rationale/argument that they did not consider and that they feel is compelling, then they may adjust their ratings to incorporate that information.
 - d. The group does not have to achieve consensus. If panelists honestly disagree, that is fine. We are trying to get the best judgment of each panelist. Panelists should not feel compelled or coerced into making a rating they disagree with.
 - e. As they finish the discussion for each MAP-A, each panelist should place it into one of four piles: *Below Basic*, *Basic*, *Proficient*, or *Advanced*.

Encourage the panelists to use the discussion and feedback to assess how stringent or lenient a judge they are. If a panelist is categorizing MAP-As consistently higher or lower than the group, he/she may have a different understanding of the Achievement Level Descriptions. **It is O.K. for panelists to disagree, but that disagreement should be based on a common understanding of the Achievement Level Descriptions.**

7. Once the discussions are complete for the full set of MAP-As, have the panelists fill in the Round 3 Rating Form. When you collect the rating forms, carefully inspect them to ensure they are filled out properly.
 - a. The ID number must be filled in.
 - b. Each MAP-A for Round 3 must have one (and only one) rating.

Grade Level Achievement Level Descriptors

After recommended cut scores have been established for the grade spans, the panels will be asked to revisit the draft achievement level descriptors. They will be asked to make recommendations for language to add to create grade level achievement level descriptors.

Complete Evaluation Form

Upon completion of the standard setting process, have panelists fill out the evaluation form. Emphasize that their honest feedback is important.

Appendix D

Bulleted Lists of Achievement Level Characteristics and Language Recommendations

**MAP-A Draft Achievement Level Descriptors
Mathematics**

Grades 3-5	Draft Descriptors	Standard Setting Bullets	Language Recommendations
Below Basic	Student has a minimal /pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.	Pre Emergent understanding <ul style="list-style-type: none"> • Minimal • No understanding of concepts • Meaningless Loosely Connected <ul style="list-style-type: none"> • Activity does not seem connected • Stretched to standards Extensive assistance <ul style="list-style-type: none"> • Most of the time • Very low/no accuracy • inconsistency 	<ul style="list-style-type: none"> • Make 2 forms- one for teachers, 1 for parents- keep the teacher document as is, change the parent document as follows: • When discussing the emerging understanding, Emerging= starting, needs more practice, needs more opportunity to demonstrate • Parents want to know where the student is and what they can do to help • Student is just being exposed to a skill • Needs assistance and or repetition and instruction from teacher • Rewrite the PLDs in bullet format, not paragraph • Clarify all of the terms with regard to “application” i.e. for Basic, Application is there, but low independence and accuracy- for Proficient, Application is there and independence and accurate is average. • The terms API and GLE should be clarified
Basic	Student has a limited /an emerging understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.	Emerging understanding <ul style="list-style-type: none"> • Limited understanding • Teacher driven application Somewhat connected <ul style="list-style-type: none"> • Stretched/grasping • Limited meaning Frequent assistance <ul style="list-style-type: none"> • Limited consistency • Low accuracy • Most of the time 	

Proficient	Student has some/a basic / a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is connected to the strands and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.	<p>Some/Basic Understanding</p> <ul style="list-style-type: none"> • Demonstrates beginning application • Blend teacher/student application <p>Connected to strand</p> <ul style="list-style-type: none"> • Has meaning <p>Some assistance</p> <ul style="list-style-type: none"> • Generally consistent • Generally accurate 	
Advanced	Student has a high level of /strong / solid understanding of the concepts contained within the strands of Numbers and Operations and Algebraic Relationships and/or Geometric and Spatial Relationships. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.	<p>Solid/strong understanding</p> <ul style="list-style-type: none"> • Demonstrate mastery through understanding <p>Clearly connected to strands</p> <ul style="list-style-type: none"> • Verbs match • Work sample match strand • API entry average is high <p>Minimal/no assistance</p> <ul style="list-style-type: none"> • Consistency • High Accuracy 	

GRADE LEVEL

Recommendations for Grades 3-5 changes

- Use age or grade in the wording. Otherwise the group felt that the idea of breaking down by grade level takes away from the IEP process

Mathematics

<p>Grades 6-8</p>	<p>Draft Descriptors</p>	<p>Standard Setting Bullets</p>	<p>Language Recommendations</p>
<p>Below Basic</p>	<p>Student has a minimal /pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.</p>	<ul style="list-style-type: none"> • Accuracy (0%) 25-30%? • Independence very low, less than 30% • No grasp of concepts • No application- may have opportunity – but independence 0% • Loosely connected- look at activity, API is a big stretch • May have unscorable entries 	<ul style="list-style-type: none"> • Student is developing skills for early learning contained within the strands of Numbers and Operations and Data and Probability. • Student work shows limited evidence of alignment to the strands. • Student requires extensive verbal, visual and/or physical assistance in order to demonstrate development of concepts and skills.
<p>Basic</p>	<p>Student has a limited /an emerging understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.</p>	<ul style="list-style-type: none"> • Accuracy is below 50% (24-40% low end)- look at interaction of I and A • Assistance- frequent- more than half the time, independent less than 50A% of the time • Not able to just give directions and leave • Some beginning understanding of skill/concept • Developing understanding of concepts • At al lower level beginning to acquire to at a higher level right before beginning to use • Activities require repetition • Academically –APIs- foundational, more functional contexts, focus on classroom and school 	<ul style="list-style-type: none"> • Student is developing knowledge and working toward comprehension of concepts and skills contained within the strands of Numbers and Operations and Data and Probability. • Student work shows to some extent evidence of alignment to the strands. • Student requires frequent verbal, visual and/or physical assistance in order to demonstrate beginning understanding of concepts and skills.

Proficient	Student has some/a basic / a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is connected to the strands and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.	<ul style="list-style-type: none"> • Higher accuracy 50%++ • Much of work done independently 50%++ • Moved beyond acquiring knowledge beginning to use • Produce at a beginning level • Building on foundational skills/concepts- connecting to various contexts, broader than classroom/school, moving to functional world (but not expected to be completely independent) 	<ul style="list-style-type: none"> • Student is comprehending and working toward application of concepts and skills contained within the strands of Numbers and Operations and Data and Probability. • Student work shows evidence of alignment to the strands. • Student requires limited verbal, visual and/or physical assistance in order to demonstrate beginning application of foundational concepts and skills.
Advanced	Student has a high level of /strong / solid understanding of the concepts contained within the strands of Numbers and Operations and Data and Probability. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.	<ul style="list-style-type: none"> • Accuracy at a high level, 75-90%? • Initiate and complete tasks independently- based on prior knowledge • High level of independence- given directions can follow through with less adult assistance • Consistent (solid) application across multiple contexts/opportunities • Produce more on their own 	<ul style="list-style-type: none"> • Student is initiating and completing tasks consistently applying prior knowledge of concepts and skills contained within the strands of Numbers and Operations and Data and Probability. • Student work shows evidence of clear alignment to the strands. • Student requires minimal to no verbal, visual and/or physical assistance in order to demonstrate consistent application of concepts and skills. <p>ACCURACY?</p>

GRADE LEVEL-

Change 1 to 2 words- that have to do with student performance- 3 words that mean extensive, frequent, limited, minimal?

Mathematics

Grade 10	Draft Descriptors	Standard Setting Bullets	Language Recommendations
Below Basic	Student has a minimal /pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.		Student has a pre-emergent understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is loosely connected to the strands. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Basic	Student has a limited /an emerging /understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.	<ul style="list-style-type: none"> • assistance given to the student occurs more than 50% of the time • student is emerging by showing some beginning understandings of the concept or skill identified in the API • student’s performance on the task shows accuracy of 59% or less • application is not consistently demonstrated 	Student has an emerging understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is somewhat connected to the strands. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.
Proficient	Student has some/a basic / a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is connected to the strands and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.	<ul style="list-style-type: none"> • assistance given to the student occurs less than 50% of the time • student’s performance on the task shows accuracy of 60% or more • application is consistently demonstrated at least 50% of the time 	Student has a fundamental understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is connected to the strands and demonstrates application. Student requires some verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.

<p>Advanced</p>	<p>Student has a high level of /strong / solid understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.</p>	<ul style="list-style-type: none"> • assistance given to the student occurs less than 80% of the time • student’s performance on the task shows accuracy of 80% or more • application is consistently demonstrated at least 80% of the time 	<p>Student has a high level of /strong / solid (felt all were okay) understanding of the concepts contained within the strands of Numbers and Operations and Measurement. Student work is clearly connected to the strands and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate their knowledge of these concepts.</p>
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Communication Arts

Grades 3-5	Draft Descriptors	Standard Setting Bullets	Language Recommendations
Below Basic	Student has a minimal understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.		When evaluating the portfolio as a whole/in its entirety the student has a minimal understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical task specific assistance in order to demonstrate knowledge and/or application of these concepts.
Basic	Student has a limited understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.	<ul style="list-style-type: none"> • Some level of independence • Limited comprehension • Frequent prompting other than typical instructional practices • Minimal accuracy • Acquisition (learning) of skills • May see some connection to standards • Inconsistent performance and/or application • Lower levels of independence 	When evaluating the portfolio as a whole/in its entirety the student has a limited understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is partially connected to the standards. Student requires frequent verbal, visual and/or physical task specific assistance in order to demonstrate knowledge and/or application of these concepts.
Proficient	Student has some understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.	<ul style="list-style-type: none"> • Beginning application of skills – see some increase of consistency • Higher level of accuracy & independence – requires some prompting • Comprehension activity higher • Starting to get ‘ah ha!’ use skills with some independence • Less teacher and more student performance 	When evaluating the portfolio as a whole/in its entirety the student has some understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is closely connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical task specific assistance in order to demonstrate knowledge of these concepts.

		<ul style="list-style-type: none"> • Student knows more of what is expected of them • Student has ability to demonstrate their responses • Closer connection to standards • More application than acquisition 	
Advanced	<p>Student has a high level of understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.</p>	<ul style="list-style-type: none"> • Independence (perform alone, less teacher direction) • Student in charge of self – minimal prompting and/or cueing • Higher comprehension of activity • Student sees the connection to the standard • Goals clearly connect to the standard • Better accuracy • Application of skill in all areas 	<p>When evaluating the portfolio as a whole/in its entirety the student has a high level of understanding of the concepts contained within the standards of the Reading Development and Processes and Standard English Conventions. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical task specific assistance in order to demonstrate knowledge of these concepts.</p>

Communication Arts

Grades 6-8	Draft Descriptors	Standard Setting Bullets	Language Recommendations
Below Basic	Student has a minimal understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.	<ul style="list-style-type: none"> • Inconsistent Low Scores • Consistent Low Performance • Dependent on Multiple Prompts • Activity is loosely based/related to the API • Students can not perform across conditions (time, setting, various persons)/in isolation • Student is a “Novice” – Beginner 	<p>Student has a minimal understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work has little connection to the standards. Student is dependent upon verbal, visual, and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.</p> <p>Other Suggestions for Parents & Teachers</p> <p>Define/Explain:</p> <ul style="list-style-type: none"> → Application of Skills → Acquisition of Skills → The Standards of Reading & Writing Development & Processes → API <p>*Many of the panelist felt the parents and some teacher do not clearly understand acquisition vs. application, the standards, or the APIs. Some sort of clear explanation on or attached to the ALDs would help.</p>
Basic	Student has a limited understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these	<ul style="list-style-type: none"> • Inconsistent Scores • Inconsistent across conditions (time, setting, various persons) but possibly attempting • Limited understanding • Basic Acquisition/Minimal Application • Frequent, varied prompts • Semi-dependent upon prompting • Limited understanding of general 	Student has a limited understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.

	concepts.	<p>knowledge</p> <ul style="list-style-type: none"> • Skills are shown mostly in isolation • Some accuracy • Emergent skill development 	
Proficient	Student has some understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.	<ul style="list-style-type: none"> • Mostly Accurate • General Understanding of basic knowledge • Complete Standard in addressed area/activity matches API • Shows application w/out much prompting • Consistent demonstration of application 	Student has a general understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is connected to the standards and demonstrates beginning application. Student requires occasional verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.
Advanced	Student has a high level of understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.	<ul style="list-style-type: none"> • Independent performance • May be able to apply across conditions with consistent high accuracy • May be able to perform consistently across time with minimal CONTENT prompting • May independently initiate • Expert-Accomplished-Practiced- A Pro! 	Student has a high level of understanding of the concepts contained within the standards of Reading and Writing Development and Processes. Student work is clearly connected to the standards and demonstrates strong application. Student seldom requires verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.

GRADE LEVEL

Students will be assessed at their relative level of ____ grade functioning.

BB:

- Inconsistent/Dependent
- Multiple prompts
- Novice – “Beginner”

B:

- Emergent
- Semi-dependent

P:

- Consistent performance
- Consistent accuracy
- Moderately High

A:

- Predominately high performance
- Consistent High Accuracy

Communication Arts

Grade 11	Draft Descriptors	Standard Setting Bullets	Language Recommendations
Below Basic	Student has a minimal understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is loosely connected to the standards. Student requires extensive verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.		Did not make changes to the draft descriptors but wanted to define type of assistance- what does this mean? accommodations vs. content change
Basic	Student has a limited understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is somewhat connected to the standards. Student requires frequent verbal, visual and/or physical assistance in order to demonstrate knowledge and/or application of these concepts.	<ul style="list-style-type: none"> • Limited ability to perform tasks • Some/occasional/inconsistent accuracy • Little generalization (maybe) • Some independence may be evident • Connection to standard is weak, but evident (task and API) 	
Proficient	Student has some understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is connected to the standards and demonstrates beginning application. Student requires some verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts.	<ul style="list-style-type: none"> • Able to perform task more often than not • More accuracy- concept understood more- “getting it” • Student begins generalizing/transference • Active participation • Some assistance required • A connection is evident between task and API 	

Advanced	<p>Student has a high level of understanding of the concepts contained within the standards of the Reading and Writing Development and Processes. Student work is clearly connected to the standards and demonstrates strong application. Student requires minimal verbal, visual and/or physical assistance in order to demonstrate knowledge of these concepts</p>	<ul style="list-style-type: none"> • Able to perform task most of the time • Solid understanding of concept • Active participation • High accuracy • Is consistent and/or transference to other settings • Little assistance required • Clear, strong connection (definite) between task and API 	
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Appendix E

Rating Forms

Complete this form FIRST

**MAP-A Mathematics Grades 3-5
Rating Form – Middle Cut**

	Round 1		Round 2	
	Below Proficient	Proficient or Above	Below Proficient	Proficient or Above
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **SECOND**

ID Number: _____

MAP-A Mathematics Grades 3-5

Rating Form – Lower Cut

	Round 1			Round 2		
	BB	B	Proficient or Above	BB	B	Proficient or Above
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

Transcribe your Round 2 “Proficient or Above” Ratings from the _____ ↑ ↑
Middle Cut Rating Form Here

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advance*

Complete this form **FOURTH**

ID Number: _____

MAP-A Mathematics Grades 3-5

Rating Form – All Cuts

	Round 3			
	BB	B	P	A
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

BB: *Below Basic*

B: *Basic*

P: *Proficient*

A: *Advanced*

Complete this form FIRST

ID Number: _____

MAP-A Mathematics Grades 6-8

Rating Form – Middle Cut

	Round 1		Round 2	
	Below Proficient	Proficient or Above	Below Proficient	Proficient or Above
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **SECOND**

ID Number: _____

MAP-A Mathematics Grades 6-8

Rating Form – Lower Cut

	Round 1			Round 2		
	BB	B	Proficient or Above	BB	B	Proficient or Above
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

Transcribe your Round 2 “Proficient or Above” Ratings from the _____ ↑ _____ ↑
Middle Cut Rating Form Here

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **FOURTH**

ID Number: _____

MAP-A Mathematics Grades 6-8

Rating Form – All Cuts

	Round 3			
	BB	B	P	A
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

BB: *Below Basic*

B: *Basic*

P: *Proficient*

A: *Advanced*

Complete this form FIRST

ID Number: _____

MAP-A Mathematics Grade 10

Rating Form – Middle Cut

	Round 1		Round 2	
	Below Proficient	Proficient or Above	Below Proficient	Proficient or Above
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms



Below Proficient includes:

BB: *Below Basic*

B: *Basic*

A: *Advanced*

Proficient or Above includes:

P: *Proficient*

Complete this form **SECOND**

ID Number: _____

MAP-A Mathematics Grade 10

Rating Form – Lower Cut

	Round 1			Round 2		
	BB	B	Proficient or Above	BB	B	Proficient or Above
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Transcribe your Round 2 “Proficient or Above” Ratings from the Middle Cut Rating Form Here



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

**MAP-A Mathematics Grade 10
Rating Form – All Cuts**

	Round 3			
	BB	B	P	A
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

BB: Below Basic
B: Basic
P: Proficient
A: Advanced

Complete this form FIRST

ID Number: _____

**MAP-A Communication Arts Grades 3-5
Rating Form – Middle Cut**

	Round 1		Round 2	
	Below Proficient	Proficient or Above	Below Proficient	Proficient or Above
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **SECOND**

ID Number: _____

MAP-A Communication Arts Grades 3-5

Rating Form – Lower Cut

	Round 1			Round 2		
	BB	B	Proficient or Above	BB	B	Proficient or Above
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

Transcribe your Round 2 “Proficient or Above” Ratings from the _____ ↑ _____ ↑
Middle Cut Rating Form Here

Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **FOURTH**

ID Number: _____

**MAP-A Communication Arts Grades 3-5
Rating Form – All Cuts**

	Round 3			
	BB	B	P	A
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				

BB: Below Basic

B: Basic

P: Proficient

A: Advanced

Complete this form FIRST

ID Number: _____

**MAP-A Communication Arts Grades 6-8
Rating Form – Middle Cut**

	Round 1		Round 2	
	Below Proficient	Proficient or Above	Below Proficient	Proficient or Above
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				

Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **SECOND**

ID Number: _____

MAP-A Communication Arts Grades 6-8

Rating Form – Lower Cut

	Round 1			Round 2		
	BB	B	Proficient or Above	BB	B	Proficient or Above
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						

Transcribe your Round 2 “Proficient or Above” Ratings from the Middle Cut Rating Form Here



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advanced*

Complete this form **FOURTH**

ID Number: _____

MAP-A Communication Arts Grades 6-8

Rating Form – All Cuts

	Round 3			
	BB	B	P	A
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				

BB: *Below Basic*

B: *Basic*

P: *Proficient*

A: *Advanc*

Complete this form FIRST

ID Number: _____

**MAP-A Communication Arts Grade 11
Rating Form – Middle Cut**

	Round 1		Round 2	
	Below Proficient	Proficient or Above	Below Proficient	Proficient or Above
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				

Transcribe these figures into the appropriate columns on the Lower and Upper Cut Rating Forms



Below Proficient includes:
BB: *Below Basic*
B: *Basic*

Proficient or Above includes:
P: *Proficient*
A: *Advance*

Complete this form **SECOND**

ID Number: _____

MAP-A Communication Arts Grade 11

Rating Form – Lower Cut

	Round 1			Round 2		
	BB	B	Proficient or Above	BB	B	Proficient or Above
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						

Transcribe your Round 2 “Proficient or Above” Ratings from the Middle Cut Rating Form Here



Below Proficient includes:

BB: *Below Basic*

B: *Basic*

A: *Advanced*

Proficient or Above includes:

P: *Proficient*

Complete this form **FOURTH**

ID Number: _____

MAP-A Communication Arts Grade 11

Rating Form – All Cuts

	Round 3			
	BB	B	P	A
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				

BB: *Below Basic*

B: *Basic*

P: *Proficient*

A: *Advanced*

Appendix F
Panelist Ratings

Table F.1: Ratings for Communication Arts 3-5 (Round 2)

MAP-A		Panelist Rating												
Number	Raw Score	ID 101	ID 102	ID 103	ID 104	ID 105	ID 106	ID 108	ID 109	ID 110	ID 111	ID 112	ID 113	ID 114
1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
2	5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	8	1	1	1	1	1	1	1	1	1	1	1	1	1
4	9	1	1	1	1	1	1	1	1	1	1	1	1	2
5	10	1	1	1	1	1	1	1	1	1	1	1	1	3
6	16	1	1	1	1	1	1	1	1	1	1	1	1	1
7	17	1	1	1	1	1	1	1	1	1	1	1	1	1
8	20	2	2	2	2	2	1	2	2	2	1	2	2	1
9	22	2	2	2	2	2	2	2	2	2	2	2	2	2
10	23	1	1	1	2	2	1	1	2	2	1	2	2	2
11	24	2	2	2	2	2	2	2	2	2	2	2	2	2
12	25	2	2	2	2	2	2	2	2	2	2	2	2	2
13	26	2	2	2	2	2	2	2	2	2	2	2	2	2
14	27	2	2	1	2	2	1	2	2	2	1	2	2	2
15	28	2	2	2	2	2	2	2	2	2	2	2	2	2
16	29	2	2	2	2	2	2	2	2	2	2	2	2	2
17	30	3	3	3	3	3	2	3	3	3	2	3	3	3
18	31	2	2	2	2	2	3	3	2	3	2	2	2	2
19	32	3	2	2	3	3	3	3	3	3	2	2	2	3
20	33	3	2	2	2	2	2	2	2	3	2	2	2	2
21	34	2	2	2	2	2	2	2	2	2	2	2	2	3
22	35	4	3	3	4	3	3	3	3	3	3	4	3	3
23	36	4	3	3	4	3	3	3	3	3	3	4	3	3
24	37	3	3	3	3	3	3	3	3	3	3	3	3	3
25	38	3	3	2	2	2	3	3	3	3	3	3	3	3
26	39	3	3	3	3	3	2	3	3	3	3	3	3	3
27	40	3	3	3	3	3	3	3	3	3	3	3	3	3
28	41	3	3	3	3	3	3	3	3	3	3	3	3	2
29	42	3	3	3	3	3	3	3	3	3	3	3	3	3
30	43	3	3	3	3	3	3	3	3	3	3	3	3	3
31	44	3	3	3	3	2	3	4	3	3	2	3	3	3
32	45	3	3	3	3	3	4	4	4	4	3	3	3	3
33	46	4	3	3	4	3	3	4	4	4	3	4	3	4
34	47	4	3	3	4	3	3	4	4	4	3	4	3	3
35	48	4	4	4	4	3	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.2: Ratings for Communication Arts 3-5 (Round 3)

MAP-A		Panelist Rating												
Number	Raw Score	ID 101	ID 102	ID 103	ID 104	ID 105	ID 106	ID 108	ID 109	ID 110	ID 111	ID 112	ID 113	ID 114
1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
2	5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	8	1	1	1	1	1	1	1	1	1	1	1	1	1
4	9	1	1	1	1	1	1	1	1	1	1	1	1	2
5	10	1	1	1	1	1	1	1	1	1	1	1	1	3
6	16	1	1	1	1	1	1	1	1	1	1	1	1	1
7	17	1	1	1	1	1	1	1	1	1	1	1	1	1
8	20	2	2	2	2	2	1	2	2	1	1	2	2	1
9	22	2	2	2	2	2	2	2	2	2	2	2	2	2
10	23	1	1	1	2	2	1	1	2	2	1	2	2	2
11	24	2	2	2	2	2	2	2	2	2	2	2	2	2
12	25	2	2	2	2	2	2	2	2	2	2	2	2	2
13	26	2	2	2	2	2	2	2	2	2	2	2	2	2
14	27	2	2	1	2	2	1	2	2	2	1	2	2	2
15	28	2	2	2	2	2	2	2	2	2	2	2	2	2
16	29	2	2	2	2	2	2	2	2	2	2	2	2	2
17	30	3	3	3	3	3	2	3	3	2	2	3	3	3
18	31	2	2	2	2	2	3	3	2	3	2	2	2	2
19	32	3	2	2	3	3	3	3	3	3	2	2	2	3
20	33	3	2	2	2	2	2	2	2	3	2	2	2	2
21	34	2	2	2	2	2	2	2	2	2	2	2	2	3
22	35	4	3	3	4	3	3	3	3	3	3	4	3	3
23	36	4	3	3	4	3	3	3	3	3	3	4	3	3
24	37	3	3	3	3	3	3	3	3	3	3	3	3	3
25	38	3	3	2	2	2	3	3	3	3	3	3	3	3
26	39	3	3	3	3	3	2	3	3	3	3	3	3	3
27	40	3	3	3	3	3	3	3	3	3	3	3	3	3
28	41	3	3	3	3	3	3	3	3	3	3	3	3	2
29	42	3	3	3	3	3	3	3	3	3	3	3	3	3
30	43	3	3	3	3	3	3	3	3	3	3	3	3	3
31	44	3	3	3	3	2	3	4	3	3	2	3	3	3
32	45	3	3	3	3	4	4	4	4	4	3	3	3	3
33	46	4	3	3	4	4	3	4	4	4	3	4	3	4
34	47	4	3	3	4	4	3	4	4	4	3	4	3	3
35	48	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.3: Ratings for Communication Arts 6-8 (Round 2)

MAP-A		Panelist Rating												
Number	Raw Score	ID 202	ID 203	ID 204	ID 206	ID 207	ID 208	ID 209	ID 210	ID 211	ID 212	ID 213	ID 214	ID 215
1	5	1	1	1	1	1	1	1	1	1	1	1	1	1
2	7	2	1	1	1	2	2	1	1	1	1	2	2	2
3	8	1	1	1	1	1	1	1	1	1	1	1	1	1
4	9	1	1	1	1	1	1	1	1	1	1	1	1	1
5	11	2	1	1	2	1	1	1	1	1	2	2	1	2
6	15	2	1	2	1	2	1	2	1	1	2	2	2	1
7	16	1	1	2	1	1	1	1	1	1	1	1	1	1
8	18	1	1	1	1	1	1	1	1	1	1	1	1	1
9	20	1	1	2	1	1	1	1	1	1	1	1	1	1
10	21	1	1	1	1	1	1	1	1	1	2	1	1	1
11	23	2	1	1	1	1	1	1	1	1	1	1	1	1
12	24	1	1	1	1	1	1	1	1	1	1	1	1	1
13	25	1	1	1	1	1	2	1	1	1	2	1	1	1
14	26	1	1	2	2	1	2	2	1	1	1	2	1	1
15	27	2	2	2	2	2	2	2	2	2	2	2	2	2
16	28	2	2	2	2	2	2	2	2	2	1	2	2	2
17	29	2	2	2	2	2	2	3	2	2	2	4	2	2
18	30	2	2	2	2	2	2	2	2	2	2	2	2	2
19	31	2	2	3	3	2	3	3	3	2	2	3	2	2
20	32	2	2	2	3	2	3	3	2	2	2	4	2	2
21	33	3	2	3	3	3	3	3	3	2	3	3	3	3
22	34	3	2	3	2	3	3	3	3	3	2	3	3	3
23	35	4	1	3	2	4	3	3	3	3	2	3	3	3
24	36	3	3	3	4	3	3	3	3	3	2	4	3	3
25	37	2	2	2	2	2	2	2	2	2	2	2	2	2
26	38	2	3	2	2	1	2	3	2	1	2	3	2	2
27	39	3	3	3	3	2	2	3	2	3	3	3	2	3
28	40	2	1	2	1	2	2	3	2	2	1	3	2	2
29	41	3	3	3	3	3	3	3	3	3	3	3	3	3
30	42	3	3	3	3	3	3	3	3	3	3	4	3	3
31	43	3	3	3	3	3	3	3	3	3	3	3	3	2
32	44	3	4	4	4	3	4	4	4	3	3	4	3	4
33	45	3	4	4	3	3	4	4	4	3	3	4	3	3
34	46	3	4	3	4	3	3	4	4	3	3	4	3	3
35	47	4	3	4	3	4	4	4	4	4	4	4	3	3
36	48	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY

1=BELOW BASIC

2=BASIC

3=PROFICIENT

4=ADVANCED

Table F.4: Ratings for Communication Arts 6-8 (Round 3)

MAP-A		Panelist Rating												
Number	Raw Score	ID 202	ID 203	ID 204	ID 206	ID 207	ID 208	ID 209	ID 210	ID 211	ID 212	ID 213	ID 214	ID 215
1	5	1	1	1	1	1	1	1	1	1	1	1	1	1
2	7	2	1	1	1	2	1	1	1	1	1	1	1	2
3	8	1	1	1	1	1	1	1	1	1	1	1	1	1
4	9	1	1	1	1	1	1	1	1	1	1	1	1	1
5	11	2	1	1	2	1	1	1	1	1	1	2	1	1
6	15	2	1	2	1	2	1	2	1	1	1	1	1	1
7	16	1	1	1	1	1	1	1	1	1	1	1	1	1
8	18	1	1	1	1	1	1	1	1	1	1	1	1	1
9	20	1	1	1	1	1	1	1	1	1	1	1	1	1
10	21	1	1	1	1	1	1	1	1	1	1	1	1	1
11	23	1	1	1	1	1	1	1	1	1	1	1	1	1
12	24	1	1	1	1	1	1	1	1	1	1	1	1	1
13	25	1	1	1	1	1	1	1	1	1	1	1	1	1
14	26	1	1	1	1	1	2	1	1	1	1	1	1	1
15	27	2	2	2	2	2	2	2	2	2	2	2	2	2
16	28	2	2	2	2	2	2	2	2	2	1	2	2	2
17	29	2	2	2	2	2	2	2	2	2	2	2	2	2
18	30	2	2	2	2	2	2	2	2	2	2	2	2	2
19	31	3	3	3	3	3	3	3	3	2	3	3	3	3
20	32	2	2	2	2	2	3	2	2	2	2	3	2	2
21	33	3	2	3	2	3	3	3	3	2	3	3	3	3
22	34	3	2	3	2	3	3	3	3	3	3	3	3	3
23	35	4	2	3	2	3	3	2	3	3	2	3	3	3
24	36	3	3	3	4	3	3	3	3	3	2	3	3	3
25	37	2	2	2	2	2	2	2	2	2	2	2	2	2
26	38	2	2	2	2	2	2	2	2	2	2	3	2	2
27	39	3	2	3	2	2	2	2	2	3	2	2	2	3
28	40	2	1	2	1	2	2	2	2	2	2	3	2	2
29	41	3	2	3	2	3	3	2	3	3	2	3	3	3
30	42	3	3	3	3	3	3	3	3	3	3	4	3	3
31	43	3	3	3	3	3	3	3	3	3	3	2	3	2
32	44	4	4	4	4	3	4	4	4	3	3	4	3	4
33	45	3	4	4	3	3	4	4	4	3	3	4	3	3
34	46	3	4	3	4	3	4	4	4	3	3	4	3	3
35	47	4	3	4	3	4	4	4	4	4	3	4	4	3
36	48	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY

1=BELOW BASIC

2=BASIC

3=PROFICIENT

4=ADVANCED

Table F.5: Ratings for Communication Arts 11 (Round 2)

MAP-A		Panelist Rating												
Number	Raw Score	ID 301	ID 302	ID 303	ID 304	ID 305	ID 306	ID 307	ID 308	ID 309	ID 310	ID 311	ID 312	ID 313
1	6	1	1	1	1	1	1	1	1	1	1	1	1	1
2	7	1	1	1	1	1	1	1	1	1	1	1	1	1
3	9	1	1	1	1	1	1	1	1	1	1	1	1	1
4	10	1	1	1	1	1	1	1	1	1	1	1	1	1
5	11	1	1	1	1	1	1	1	1	1	1	1	1	1
6	18	1	1	1	1	1	1	1	1	1	1	1	1	1
7	20	1	1	1	2	2	1	2	1	2	2	1	1	1
8	21	1	1	1	2	1	1	1	1	1	1	1	1	1
9	23	1	1	1	2	1	1	1	1	1	2	1	1	2
10	24	1	1	1	1	1	1	1	1	1	2	1	1	1
11	25	1	1	1	1	1	1	1	1	1	1	1	1	1
12	26	2	2	1	2	2	2	2	2	2	2	1	1	2
13	27	2	2	2	2	2	2	3	2	2	3	1	2	2
14	28	2	2	2	2	2	2	2	2	2	2	1	2	2
15	29	2	3	2	3	2	2	2	2	2	2	1	2	2
16	30	3	3	2	3	3	3	3	3	3	3	1	3	3
17	31	2	3	2	2	2	2	2	2	2	1	1	2	2
18	32	2	2	2	2	2	2	2	2	2	1	2	2	2
19	33	2	2	2	2	3	2	2	2	2	3	2	2	2
20	34	3	3	2	3	3	3	3	2	3	4	2	3	3
21	35	2	2	2	3	2	2	2	2	2	3	1	2	2
22	36	2	3	2	2	2	2	2	2	2	1	1	2	2
23	37	1	2	1	2	2	1	1	1	1	1	2	1	1
24	38	1	1	1	1	1	1	1	1	1	1	1	1	1
25	39	3	3	3	3	2	3	3	3	3	4	3	3	3
26	40	3	3	3	3	3	3	3	2	3	3	2	3	3
27	41	3	3	3	3	3	3	3	3	3	3	3	3	3
28	42	4	4	4	4	4	4	4	3	4	4	3	4	4
29	43	3	3	3	3	3	3	3	3	3	4	3	3	3
30	44	3	3	3	3	3	3	3	2	3	4	2	2	3
31	45	3	3	3	3	3	3	3	3	3	4	4	3	3
32	46	3	3	3	4	4	3	3	3	4	4	4	3	3
33	47	4	4	4	4	4	4	4	4	4	4	4	4	4
34	48	4	4	4	4	3	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.6: Ratings for Communication Arts 11 (Round 3)

MAP-A		Panelist Rating												
Number	Raw Score	ID 301	ID 302	ID 303	ID 304	ID 305	ID 306	ID 307	ID 308	ID 309	ID 310	ID 311	ID 312	ID 313
1	6	1	1	1	1	1	1	1	1	1	1	1	1	1
2	7	1	1	1	1	1	1	1	1	1	1	1	1	1
3	9	1	1	1	1	1	1	1	1	1	1	1	1	1
4	10	1	1	1	1	1	1	1	1	1	1	1	1	1
5	11	1	1	1	1	1	1	1	1	1	1	1	1	1
6	18	1	1	1	1	1	1	1	1	1	1	1	1	1
7	20	1	1	1	2	2	1	2	1	1	2	1	1	1
8	21	1	1	1	1	1	1	1	1	1	1	1	1	1
9	23	1	1	1	2	1	1	1	1	1	2	1	1	2
10	24	1	1	1	1	1	1	1	1	1	2	1	1	1
11	25	1	1	1	1	1	1	1	1	1	1	1	1	1
12	26	2	2	1	2	2	2	2	2	2	2	1	1	2
13	27	2	2	2	2	2	2	2	2	2	2	1	2	2
14	28	2	2	2	2	2	2	2	2	2	2	1	2	2
15	29	2	2	2	3	2	2	2	2	2	2	1	2	2
16	30	3	3	2	3	3	3	3	2	2	2	2	2	3
17	31	2	2	2	3	2	2	2	2	2	2	1	2	2
18	32	2	2	2	2	2	2	2	2	2	1	2	2	2
19	33	2	2	2	2	3	2	2	2	2	2	2	2	2
20	34	3	3	2	3	3	3	3	2	2	2	2	3	3
21	35	2	2	2	3	2	2	2	2	2	2	2	2	2
22	36	2	2	2	4	2	2	2	2	2	1	2	2	2
23	37	1	2	1	4	2	1	1	1	1	1	2	1	1
24	38	2	1	1	4	1	1	1	1	1	1	1	1	1
25	39	3	3	3	3	3	3	3	3	3	3	3	3	3
26	40	3	3	3	3	3	3	3	2	3	4	2	3	3
27	41	3	3	3	3	3	3	3	3	3	4	3	3	3
28	42	4	4	4	4	4	4	4	3	4	4	3	4	4
29	43	3	3	3	3	3	3	3	3	3	3	3	3	3
30	44	3	3	3	3	3	3	3	2	3	3	2	1	3
31	45	3	3	3	3	3	3	3	3	3	3	4	3	3
32	46	3	3	3	4	4	3	3	3	4	4	4	3	3
33	47	4	4	4	4	4	4	4	4	4	4	4	4	4
34	48	4	4	4	4	3	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.7: Ratings for Mathematics 3-5 (Round 2)

MAP-A		Panelist Rating												
Number	Raw Score	ID 401	ID 403	ID 404	ID 405	ID 406	ID 407	ID 408	ID 409	ID 410	ID 411	ID 412	ID 413	ID 415
1	6	1	1	1	1	1	1	1	1	1	1	1	1	1
2	8	1	1	1	1	1	1	2	1	2	1	1	1	1
3	10	1	1	1	1	1	1	2	1	1	1	1	1	1
4	12	1	1	1	1	1	1	1	1	1	1	1	1	1
5	14	1	1	1	2	1	1	1	1	1	2	1	1	2
6	17	1	1	1	1	1	1	1	1	1	1	1	1	1
7	20	1	2	2	1	1	2	2	2	2	2	2	2	2
8	21	2	1	1	1	1	1	1	2	2	2	2	1	1
9	22	1	2	2	2	1	1	2	2	2	2	2	2	2
10	23	1	2	2	1	1	1	2	2	2	2	2	2	1
11	24	1	2	2	2	1	1	2	1	2	2	2	2	2
12	25	2	2	2	2	2	1	2	2	2	2	2	2	2
13	26	2	2	2	2	2	2	2	2	2	2	2	2	2
14	27	2	2	2	2	2	1	1	2	1	2	2	2	1
15	28	2	2	2	3	2	2	2	2	2	2	2	3	2
16	29	3	3	2	2	2	2	2	2	2	2	2	3	2
17	30	2	2	2	2	2	2	2	2	2	3	2	3	2
18	31	3	2	3	3	2	3	3	3	3	3	3	3	2
19	32	3	3	3	3	2	3	3	3	3	3	3	3	3
20	33	3	3	3	3	2	3	2	3	3	3	3	3	3
21	34	3	3	3	3	3	3	2	3	2	3	3	3	3
22	35	3	3	3	3	3	3	3	3	3	3	3	3	3
23	36	2	2	3	2	2	2	2	2	2	2	2	3	2
24	37	3	3	3	3	3	3	3	3	3	3	3	3	3
25	38	3	3	3	3	3	3	3	3	3	3	3	3	3
26	39	3	3	3	4	4	4	3	3	3	3	3	3	4
27	40	3	3	3	3	3	3	3	3	3	3	3	3	3
28	41	3	3	3	3	3	4	3	3	3	3	3	4	3
29	42	3	3	3	3	3	3	3	3	3	3	3	4	3
30	43	4	4	4	4	4	4	3	4	3	4	4	4	4
31	44	3	3	3	3	3	4	4	3	3	3	3	4	3
32	45	4	4	4	4	4	4	3	4	3	3	4	4	4
33	46	3	3	3	3	3	3	3	3	3	3	3	4	3
34	47	4	3	4	4	4	4	4	4	3	4	3	4	4
35	48	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.8: Ratings for Mathematics 3-5 (Round 3)

MAP-A		Panelist Rating												
Number	Raw Score	ID 401	ID 403	ID 404	ID 405	ID 406	ID 407	ID 408	ID 409	ID 410	ID 411	ID 412	ID 413	ID 415
1	6	1	1	1	1	1	1	1	1	1	1	1	1	1
2	8	1	1	1	1	1	1	2	1	2	1	1	1	1
3	10	1	1	1	1	1	1	1	1	1	1	1	1	1
4	12	1	1	1	1	1	1	1	1	1	1	1	1	1
5	14	1	1	1	1	1	1	1	1	1	1	1	1	1
6	17	1	1	1	1	1	1	1	1	1	1	1	1	1
7	20	1	1	2	1	1	2	2	2	2	2	2	2	2
8	21	2	1	1	1	1	1	1	1	2	2	2	2	1
9	22	1	2	2	1	1	1	2	2	2	2	2	2	2
10	23	1	2	2	1	1	1	2	2	2	2	2	2	1
11	24	1	2	2	2	1	1	1	1	2	2	2	2	2
12	25	2	2	2	2	2	2	2	2	2	2	2	2	2
13	26	2	2	2	2	2	2	2	2	2	2	2	2	2
14	27	2	2	2	2	2	2	1	2	1	2	2	2	1
15	28	2	2	2	2	2	2	2	2	2	2	2	2	2
16	29	2	2	2	2	2	2	2	2	2	2	2	3	2
17	30	2	2	2	2	2	2	2	2	2	2	2	3	2
18	31	3	2	3	2	2	3	3	3	3	2	3	3	2
19	32	3	3	3	3	2	3	3	3	3	3	3	3	3
20	33	3	3	3	3	2	3	2	3	3	3	3	3	3
21	34	3	3	3	3	3	3	3	3	3	3	3	3	3
22	35	3	3	3	3	3	3	3	3	3	3	3	3	3
23	36	2	2	2	2	2	2	2	2	2	2	2	3	2
24	37	3	3	3	3	3	3	3	3	3	3	3	3	3
25	38	3	3	3	3	3	3	3	3	3	3	3	3	3
26	39	3	3	3	4	4	4	3	3	3	3	3	3	4
27	40	3	3	3	3	3	3	3	3	3	3	3	3	3
28	41	3	3	3	3	3	4	3	3	3	3	3	4	3
29	42	3	3	3	3	3	3	3	3	3	3	3	4	3
30	43	4	3	3	4	4	4	3	4	3	3	4	4	4
31	44	3	3	3	3	3	4	4	3	3	3	3	4	3
32	45	4	4	3	4	4	4	3	4	3	4	4	4	4
33	46	3	3	3	3	3	3	3	3	3	3	3	4	3
34	47	4	4	4	4	4	4	4	4	3	4	4	4	4
35	48	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.9: Ratings for Mathematics 6-8 (Round 2)

MAP-A		Panelist Rating												
Number	Raw Score	ID 501	ID 502	ID 503	ID 504	ID 506	ID 507	ID 508	ID 509	ID 510	ID 511	ID 513	ID 514	ID 515
1	7	1	1	1	1	1	1	1	1	1	1	1	1	1
2	9	1	1	1	1	1	1	1	1	1	1	1	1	1
3	11	1	1	1	1	1	1	1	1	1	1	1	1	1
4	12	1	1	1	1	1	1	1	1	1	1	1	1	1
5	13	1	1	2	1	1	1	1	1	1	1	1	1	1
6	18	1	1	2	1	1	1	1	1	1	1	1	1	1
7	20	1	1	1	2	1	1	1	1	2	1	1	1	1
8	21	1	1	1	1	1	1	1	1	1	1	1	1	1
9	22	1	1	2	1	1	1	1	1	1	1	1	1	1
10	23	1	1	1	2	1	1	1	1	1	1	1	1	1
11	24	1	1	1	1	1	1	1	1	1	1	1	1	1
12	25	1	1	2	2	1	1	1	2	1	1	1	2	1
13	26	1	1	2	2	2	2	1	2	1	1	1	2	1
14	27	1	1	1	1	1	1	1	1	1	1	1	1	1
15	28	2	2	2	2	2	2	2	2	2	2	2	2	2
16	29	2	2	2	2	2	2	2	2	2	2	1	3	2
17	30	2	2	2	2	3	2	2	2	2	2	2	3	2
18	31	2	2	2	2	3	2	2	2	2	2	2	3	2
19	32	2	3	3	3	3	3	2	3	3	3	2	3	3
20	33	2	3	3	3	3	3	2	3	3	3	2	3	3
21	34	3	3	3	3	3	3	3	3	3	3	3	3	3
22	35	3	3	3	3	3	3	3	3	3	3	3	3	3
23	36	3	3	3	3	3	3	3	3	3	3	3	3	3
24	37	3	3	3	3	3	3	3	3	3	3	3	3	3
25	38	3	3	3	3	3	3	3	3	3	3	3	3	3
26	39	3	3	3	3	3	3	3	3	3	3	3	3	3
27	40	3	3	4	4	4	4	4	4	4	4	3	4	4
28	41	3	3	3	3	3	3	3	3	3	3	3	3	3
29	42	3	3	4	3	3	3	3	3	3	3	3	3	3
30	43	4	4	4	4	4	4	3	4	4	3	4	4	4
31	44	3	4	4	4	4	4	3	3	3	3	3	3	4
32	45	3	3	4	4	4	4	3	3	3	3	3	3	3
33	46	4	3	4	4	4	3	4	4	4	4	3	3	3
34	47	4	4	4	4	4	4	4	4	4	4	4	4	4
35	48	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.10: Ratings for Mathematics 6-8 (Round 3)

MAP-A		Panelist Rating													
Number	Raw Score	ID 501	ID 502	ID 503	ID 504	ID 506	ID 507	ID 508	ID 509	ID 510	ID 511	ID 512	ID 513	ID 514	ID 515
1	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	13	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	20	1	1	1	2	1	1	1	1	1	1	1	1	1	1
8	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	23	1	1	1	2	1	1	1	1	1	1	1	1	1	1
11	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	25	1	1	1	2	1	1	1	2	2	1	1	1	1	1
13	26	1	1	1	2	1	1	1	2	2	1	2	1	1	1
14	27	1	1	2	1	1	1	1	1	2	2	1	1	1	1
15	28	2	2	2	2	2	2	2	2	2	2	2	2	2	2
16	29	2	2	2	2	2	2	2	2	2	2	2	2	2	2
17	30	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18	31	2	2	2	2	2	2	2	2	2	2	2	2	2	2
19	32	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	33	2	2	2	3	2	2	2	2	3	3	2	2	2	2
21	34	3	3	3	3	3	3	3	3	3	3	3	3	3	3
22	35	3	3	3	3	3	3	3	3	3	3	3	3	3	3
23	36	3	3	3	3	3	3	3	3	3	3	3	3	3	3
24	37	3	3	3	3	3	3	3	3	3	3	3	3	3	3
25	38	3	3	3	3	3	3	3	3	3	3	3	3	3	3
26	39	3	3	3	3	3	3	3	3	3	3	3	3	3	3
27	40	3	3	4	4	3	3	3	4	4	3	4	3	3	4
28	41	3	3	3	3	3	3	3	3	3	3	3	3	3	3
29	42	3	3	3	3	3	3	3	3	3	3	3	3	3	3
30	43	3	3	4	4	4	4	3	4	4	3	4	3	3	4
31	44	3	3	3	3	3	3	3	3	3	3	3	3	3	3
32	45	3	3	3	3	3	3	3	3	3	3	3	3	3	3
33	46	4	4	3	4	4	3	4	4	4	4	3	3	4	3
34	47	4	4	4	4	4	4	4	4	4	4	4	4	4	4
35	48	4	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY

1=BELOW BASIC

2=BASIC

3=PROFICIENT

4=ADVANCED

Table F.11: Ratings for Mathematics 10 (Round 2)

MAP-A		Panelist Rating													
Number	Raw Score	ID 601	ID 602	ID 603	ID 604	ID 605	ID 606	ID 607	ID 608	ID 609	ID 610	ID 611	ID 612	ID 613	ID 614
1	8	2	1	1	1	1	1	1	1	1	1	1	1	1	1
2	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	24	1	2	2	1	2	1	2	1	1	1	1	2	1	1
7	25	2	2	2	2	2	2	2	2	2	2	2	2	2	2
8	26	1	2	2	2	2	2	2	2	2	2	2	2	2	2
9	27	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	28	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	29	3	2	2	2	2	2	2	2	2	2	2	2	2	2
12	30	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13	31	2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	32	1	2	3	2	2	3	2	2	2	2	3	3	2	3
15	33	2	2	3	2	2	3	2	2	2	3	2	3	2	3
16	34	3	2	3	3	3	3	2	2	3	3	3	2	2	3
17	35	2	3	3	3	3	3	3	3	3	3	3	3	3	3
18	36	2	3	3	3	3	3	3	3	3	3	2	2	3	3
19	37	3	3	3	3	3	3	3	3	3	3	3	3	3	3
20	38	3	3	3	3	2	3	3	3	3	3	3	2	3	3
21	39	3	3	3	3	3	3	3	3	3	3	3	3	3	3
22	40	3	3	3	3	3	3	3	3	3	3	3	3	3	3
23	41	2	3	3	3	3	3	3	3	3	3	3	2	3	3
24	42	2	3	3	3	3	3	3	3	3	3	3	3	3	3
25	43	3	3	3	4	3	3	3	3	3	3	3	3	3	3
26	44	3	3	3	3	4	3	3	3	3	3	3	3	3	3
27	45	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28	46	3	3	3	3	3	4	4	4	3	4	4	4	3	4
29	47	4	4	4	4	4	4	4	4	4	4	4	4	4	4
30	48	3	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Table F.12: Ratings for Mathematics 10 (Round 3)

MAP-A		Panelist Rating													
Number	Raw Score	ID 601	ID 602	ID 603	ID 604	ID 605	ID 606	ID 607	ID 608	ID 609	ID 610	ID 611	ID 612	ID 613	ID 614
1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	9	2	1	1	1	1	1	1	1	1	1	1	1	1	1
3	21	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	23	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	25	2	2	1	2	2	2	2	2	2	1	2	2	2	2
8	26	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9	27	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	28	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	29	2	2	2	2	2	2	2	2	2	2	2	2	2	2
12	30	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13	31	2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	32	2	2	2	2	2	3	2	3	2	2	3	3	2	2
15	33	3	2	3	2	2	3	2	3	2	3	3	3	2	3
16	34	2	2	2	2	2	2	2	1	2	2	2	2	2	2
17	35	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	36	3	3	3	3	3	3	3	3	3	3	3	3	3	3
19	37	3	3	3	3	3	3	3	3	3	3	3	3	3	3
20	38	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21	39	3	3	3	3	3	3	3	3	3	3	3	3	3	3
22	40	3	3	3	3	3	3	3	3	3	3	3	3	3	3
23	41	3	3	3	3	3	3	3	3	3	3	3	3	3	3
24	42	3	3	3	3	3	3	3	3	3	3	3	3	3	3
25	43	3	3	3	3	3	3	3	3	3	3	3	3	3	3
26	44	3	3	3	3	3	3	3	3	3	3	3	3	3	3
27	45	4	3	3	3	4	3	3	3	3	3	4	4	3	3
28	46	4	3	4	3	4	4	4	4	3	4	4	4	3	4
29	47	4	4	4	4	4	4	4	4	4	4	4	4	4	4
30	48	4	4	4	4	4	4	4	4	4	4	4	4	4	4

KEY 1=BELOW BASIC 2=BASIC 3=PROFICIENT 4=ADVANCED

Appendix G

Evaluation Form Results

Evaluation Results Overall

	Very Good	Good	Unsure	Poor	Very Poor		N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	30/38%	43/54%	4/5%	2/3%	0/0%		79
	Very Clear	Clear	Somewhat Clear	Not Clear			N
How clear were you with the achievement level descriptors?	16/20%	41/51%	20/25%	3/4%			80
	About Right	Too little time	Too much time				N
How would you judge the length of time of this meeting for setting performance standards	73/91%	2/3%	5/6%				80
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	Ave. Score	N
The achievement level descriptors	0	2	20	36	21	3.91	80
The assessment samples	1	3	4	28	44	4.39	80
Other panelists	1	16	34	23	6	3.21	80
My experience in the field	2	2	12	26	38	4.2	80
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No		N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	27/36%	41/55%	6/8%	1/1%	0/0%		75
How could the standard setting process have been improved?	See Grade Span/Content Area Results						
For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	Ave. Score	N
The opening session was:	0	8	25	24	19	3.71	76
The achievement level descriptors were:	1	5	18	43	9	3.71	76
Providing additional details to the achievement level descriptors was:	1	2	19	28	24	3.97	74
The discussion with other panelists was:	1	2	7	20	46	4.42	76
The portfolio rating task was:	0	2	9	37	26	4.18	74
The impact data provided prior to the last round of ratings was:	0	2	12	29	27	4.16	70
Please provide any additional comments or suggestions about the standard setting process.	See Grade Span/Content Area Results						

Evaluation Results 3-5 Communication Arts

	Very Good	Good	Unsure	Poor	Very Poor	N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	1	11		1		13
	Very Clear	Clear	Somewhat Clear	Not Clear		N
How clear were you with the achievement level descriptors?	2	6	5			13
	About Right	Too little time	Too much time			N
How would you judge the length of time of this meeting for setting performance standards	11	1	1			13
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	N
The achievement level descriptors	0	0	3	4	6	13
The assessment samples	0	1	0	3	9	13
Other panelists	1	5	5	2	0	13
My experience in the field	0	1	3	3	6	13
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No	N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	8	5				13
Comments:	<ul style="list-style-type: none"> • A good spread when looking at the entire population. • The majority of the scores fell in the average or proficient/basic range. • O liked the idea that even with much discussion the score scale ended up with a good curve. • With proficient being considered an average score, we've established an approximate bell curve with 18% below proficient and 18% above proficient. • Our cut score percentages were similar to a bell curve- most proficient and equal smaller amounts above and below proficient. • Our percentages were a bell curve. • Based on averages and curves the scores reflect what you would expect. • The percentages of assessments above and below the average were the same. • Scores follow nicely along the bell curve. 					
How could the standard setting process have been improved?	<ul style="list-style-type: none"> • Maybe an overview of terms like application and acquisition. • We could have set goals when an activity needed to be completed. • Some panelists were not clear on MAP-A type terminology and process. Some of the professionals on the panel needed to be reminded of appropriate and constructive ways to disagree with colleagues. • This was new to me. The facilitator did an excellent job explaining, keeping us on track. • The initial task of discussing and describing a typical student for Basic, Proficient and Advanced would have been more effective if done after the initial sort of the highlighted numbers. This would allow those with little experience with MAP-A to have a better understanding of the MAP-A. • Should have been given a better overview of the MAP-A. • Consider training the participants who are unfamiliar with MAP-A. • More standardized facilitators between groups. • Provide more training up front on application and acquisition for those not familiar with MAP-A. 					

For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	N
The opening session was:	0	1	7	5		13
The achievement level descriptors were:	0	1	3	7	2	13
Providing additional details to the achievement level descriptors was:	0	0	5	5	2	12
The discussion with other panelists was:	1	2	3	4	3	13
The portfolio rating task was:	0	2	1	6	2	11
The impact data provided prior to the last round of ratings was:	0	1	3	1	6	11
Please provide any additional comments or suggestions about the standard setting process.	<ul style="list-style-type: none"> • One packet was completed by a panelist in the room and should have been discarded. • Start all participants with a basic knowledge base. • We wasted a lot of time discussing the scoring process- we should have been instructed to remove this from our minds and focus on the task at hand. • I have concerns on MAP-As where the teacher messed things up. • Good facilitator. 					

Evaluation Results 6-8 Communication Arts

	Very Good	Good	Unsure	Poor	Very Poor	N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	5	6	2			13
	Very Clear	Clear	Somewhat Clear	Not Clear		N
How clear were you with the achievement level descriptors?	2	5	4	2		13
	About Right	Too little time	Too much time			N
How would you judge the length of time of this meeting for setting performance standards	13					13
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	N
The achievement level descriptors	0	2	6	3	2	13
The assessment samples	0	1	1	4	7	13
Other panelists	0	4	5	4	0	13
My experience in the field	1	1	2	3	6	13
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No	N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	2	8	2			12
Comments:	<ul style="list-style-type: none"> • More info on MAP-A profiles. • More information early about the process. • More direction or facilitation on the defining of achievement levels at the beginning. • Clear understanding as to how missing collection periods were scored should have been provided. • Less discussion on setting bullets for each level. Got hung up on #'s 					
How could the standard setting process have been improved?	<ul style="list-style-type: none"> • More info on MAP-A profiles. • More information early about the process. • More direction or facilitation on the defining of achievement levels at the beginning. • Clear understanding as to how missing collection periods were scored should have been provided. • Less discussion on setting bullets for each level. Got hung up on #'s. 					
For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	N
The opening session was:	0	2	5	2	4	13
The achievement level descriptors were:	1	2	2	7	1	13
Providing additional details to the achievement level descriptors was:	1	1	7	3	1	13
The discussion with other panelists was:	0	0	1	7	5	13
The portfolio rating task was:	0	0	3	8	2	13
The impact data provided prior to the last round of ratings was:	0	1	2	6	2	11
Please provide any additional comments or suggestions about the standard setting process.	<ul style="list-style-type: none"> • Panelist needed to have a shared understanding of the impact of missing data and unscorable entries. This should have been done before the first cut. 					

Evaluation Results 11 Communication Arts

	Very Good	Good	Unsure	Poor	Very Poor	N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	7	6				13
	Very Clear	Clear	Somewhat Clear	Not Clear		N
How clear were you with the achievement level descriptors?	2	10	1			13
	About Right	Too little time	Too much time			N
How would you judge the length of time of this meeting for setting performance standards	10	1	2			13
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	N
The achievement level descriptors	0	0	1	11	1	13
The assessment samples	1	0	1	6	5	13
Other panelists	0	1	7	5	0	13
My experience in the field	0	0	1	10	2	13
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No	N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	5	5	2			12
Comments:	<ul style="list-style-type: none"> • By design the API's should be chosen so the student can be successful. • I'm not exactly sure how this part of the process works I hope that our hard work produced the expected outcome. • There were some discrepancies with the set we had, however, I realize that we did not have a set that was chosen as a norm. • Because of our understanding of students and teachers it was easier to make decisions. • We were pretty cohesive as a group. • There were a few discrepancies that could not be resolved which left it open. • The scores appeared to correlate with MAP and adequately addressed the results. • Our work was mostly consistent with the exam score scale we did not have access to the data until the very end. 					
How could the standard setting process have been improved?	<ul style="list-style-type: none"> • All participants have some knowledge of the assessment process and vocabulary. • The process was set up very well but would consider longer mornings and afternoons away from reading all day. • Time allotments with more time to detox. • Having some examples first that would help set the four levels, I am not sure we really knew what we needed and spent that first morning stagnating. • Clearer directions for individual group achievement level descriptions settings • At least in our group, we were not in agreement in terms of the achievement level descriptors. Many interpreted them differently. Vague terminology such as "frequent, somewhat, minimal etc" added to the disparity. Even after rewording the descriptors many group members disagreed. I think that the descriptors should be clearer, more definite. 					

For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	N
The opening session was:	0	0	3	4	5	12
The achievement level descriptors were:	0	0	5	5	2	12
Providing additional details to the achievement level descriptors was:	0	1	1	3	7	12
The discussion with other panelists was:	0	0	0	3	9	12
The portfolio rating task was:	0	0	0	6	6	12
The impact data provided prior to the last round of ratings was:	0	0	4	5	2	12
Please provide any additional comments or suggestions about the standard setting process.	<ul style="list-style-type: none"> Appreciated the opportunity to be involved in the process! 					

Evaluation Results 3-5 Mathematics

	Very Good	Good	Unsure	Poor	Very Poor	N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	4	6	2			12
	Very Clear	Clear	Somewhat Clear	Not Clear		N
How clear were you with the achievement level descriptors?	2	4	6	1		13
	About Right	Too little time	Too much time			N
How would you judge the length of time of this meeting for setting performance standards	12		1			13
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	N
The achievement level descriptors	0	0	3	4	6	13
The assessment samples	0	1	2	4	6	13
Other panelists	0	2	7	4	0	13
My experience in the field	1	0	2	2	8	13
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No	N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	3	8	1	1		13
Comments:	<ul style="list-style-type: none"> • There were too many subjective/personal feelings. Our task was to collectively come up with an objective process. The idea was to have various backgrounds in the panel. I feel once we set our criteria we did not fully stick to it because of our various backgrounds and passions. • You expect to see your larger #'s in the middle – Advance and BB will have less students. • I think there are too many (%) in the advanced group, but I do think we judged what we had accurately. • As explained in the scores were derived from the data presented by the group. • We pretty well agreed. • From our group cuts, looked close to the overall %'s. • One panelist staunchly refused to adhere to the standards set forth in the descriptors, instead setting her own criteria. Hopefully this will have minimal impact. • We worked through several issues related to our descriptors. • Seems pretty close – Advanced category might be lower than 32.7% and below basic might be higher than 3.6%. • 					
How could the standard setting process have been improved?	<ul style="list-style-type: none"> • Let's explain in the introduction the true need for all the participants, so it will cut through some of the feeling of personal attack when someone gives an opinion. i.e., A teachers perspective, SPED perspective, parent perspective. A collective effort. • No improvement. • I thought it was very good and I learned a lot. • More clarification of the achievement level descriptors – more examples of each level at the beginning. • The standard setting process was done beautifully. • Just more advanced training on MAP-A achievement level descriptors 					

	<ul style="list-style-type: none"> • Parents who were pulled in to be panelist should be trained about standardized testing procedures and MAP in general. • More assertive knowledgeable facilitator. • Participants came with different levels of prior knowledge of MAP-A. We lost a good deal of time getting on the same page. 					
	<ul style="list-style-type: none"> • This was my first experience with a standard setting process, so I learned a great deal about the process. We accomplished the task – no suggestions. • Not sure – I believe that process goals were achieved - I learned a great amount about the new MAP-A process. 					
For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	N
The opening session was:	0	1	4	4	3	12
The achievement level descriptors were:	0	2	3	6	1	12
Providing additional details to the achievement level descriptors was:	0	0	3	7	2	12
The discussion with other panelists was:	0	0	1	2	9	12
The portfolio rating task was:	0	1	1	4	6	12
The impact data provided prior to the last round of ratings was:	0	0	0	5	6	11
Please provide any additional comments or suggestions about the standard setting process.	<ul style="list-style-type: none"> • Please clearly define to panelist if we are rescoring. Are we to analyze or discount; throw out or categorize based on submitted test or base on material given. Can we look at disability, absenteeism, teacher choice or even teacher forgetting to submit items. • Jake was a great facilitator for our group. It moved along but everyone felt safe in talking. I do think more special education teachers need to be involved. It was a great learning experience. • This process was very informative. I am extremely grateful to have been a part of the process. It was remarkable how the participants from varying disciplines worked together to determine the best fit for our children. • We like Jake. Seriously, he facilitated – not directed. He kept us on task but let us discuss when we needed to. • Training must be more precise for the MAP-A. The assessment samples varied in completeness, this had impact upon the standard settings. API’s need to relate better to ability levels. • The final cut process was <u>PAINFUL!</u> Why do we continue to beat a dead horse. Susan Izard handled the opening session very well. Our group facilitator was nice but needed to be more assertive to keep things moving. • Excellent facilitator! • I feel that there should be a “train the trainer” conference which includes the same type activities. District representatives could attend and then take the info back to their district MAP-A personnel. • We are attempting to rate profiles where tasks have been selected by teachers as if they were individual goals on an I.E.P. • This process in effect null and voids the opportunity of collecting reliable data to measure an educational institution’s performance. • Allowing the teachers to select the API’s and then having scorers rate the task that cover a broad range of simplicity of complexity within the same grade set totally skews the meaning of BB – B – P – to Advanced. The achievement level descriptors then are in effect meaningless to reflect facts about achievement more so than “feelings” on student’s personal accomplishment with acquisitioning another level of personal success. 					

Evaluation Results 6-8 Mathematics

	Very Good	Good	Unsure	Poor	Very Poor	N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	9	4		1		14
	Very Clear	Clear	Somewhat Clear	Not Clear		N
How clear were you with the achievement level descriptors?	6	7	1			14
	About Right	Too little time	Too much time			N
How would you judge the length of time of this meeting for setting performance standards	14					14
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	N
The achievement level descriptors	0	0	4	7	3	14
The assessment samples	0	0	0	7	7	14
Other panelists	0	2	5	5	2	14
My experience in the field	0	0	3	6	5	14
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No	N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	4	9				13
Comments:	<ul style="list-style-type: none"> • This was a painstaking process. Everyone was fully invested and our individuals cut offs initially were pretty close together. • I believe the cut scores are going to be the best this group could come to. • If our MAP-As were representative of others- then based on that- yes, I feel that the cut scores are placed correctly • Since this is an alternate assessment and teachers were given the freedom to choose APIs at their leisure, scores should reflect higher achievement levels of MAP-A students. • Yes, because of a great number of considerations/factor discussed; background information provided about the scoring process, sufficient time to revisit the issue and change if needed. • I feel we did well in setting the standards with very few conflicts. • I feel that given all human factors and the subjective format it is as accurate as possible. • A lot of thought and discussion was had regarding the assessment samples with good input. I feel we came up with very appropriate cut scores. 					
How could the standard setting process have been improved?	<ul style="list-style-type: none"> • Pre-training on process and MAP- A history. • Since some of us had not participated in administering these alternate assessments, it would have been helpful to have had more explanation regarding how the scoring was done. This should have been done in small group. • The standard setting process could be improved by having any regular education teacher informed of what some of the verbiage the special education teacher uses means so time would be better used. • Too many participants did not have a clear understanding of MAP-A. These participants should have received some sort of training- not just a brief overview. • Felt pushed to “revisit” certain portfolios to help meet facilitator’s unspoken agenda for cut points. • Some parents and agency reps. seemed to lack understanding of MAP-A and the process, which appeared to cause confusion during some discussions of the process. 					

	<ul style="list-style-type: none"> • Re-set standards not more than 3-4 years from now – because the “teacher” factor is so great and the process is so new and overwhelming. 					
	<ul style="list-style-type: none"> • Give parents and outsiders (non-teachers) samples of API’s and form completion guidelines. • I don’t know that it could have. We had an excellent leader and I think each person on our panel took this seriously. • I think it is important to have a strong session leader to provide direction and keep panelists on track. • Parents, non-educators, etc. not involved in implementing MAP-A would benefit from knowing verbiage and process of MAP–A, also would benefit from knowing how scored. Spent too much time on looking at “scoring” issues. Felt we were scoring teacher proficiency as opposed to have assessment of student (putting body of evidence together). 					
For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	N
The opening session was:	0	2	4	5	3	14
The achievement level descriptors were:	0	0	2	11	1	14
Providing additional details to the achievement level descriptors was:	0	0	2	4	8	14
The discussion with other panelists was:	0	0	2	2	10	14
The portfolio rating task was:	0	0	1	9	4	14
The impact data provided prior to the last round of ratings was:	0	0	1	9	4	14
Please provide any additional comments or suggestions about the standard setting process.	<ul style="list-style-type: none"> • Good cross section of participants . • Good facilitator. • Susan Izard excellent facilitator. • I thought this was an extremely important education and interesting panel. The session was well conducted and I thought our panel stayed on task and did the job to the best of our ability. • Training in the different parts of the portfolio and what they mean in the compilation of the score. • Find a way to focus more on the academic part of the assessment. This would have to occur during training for producing the assessment in the classroom through to the standard setting process. • We need a video about how to submit MAP-A for all schools, so we all hear the same thing. 					

Evaluation Results 10 Mathematics

	Very Good	Good	Unsure	Poor	Very Poor	N
What is your overall impression of the process used to set performance standards for the Missouri Alternate Assessment?	4	10				14
	Very Clear	Clear	Somewhat Clear	Not Clear		N
How clear were you with the achievement level descriptors?	2	9	3			14
	About Right	Too little time	Too much time			N
How would you judge the length of time of this meeting for setting performance standards	13		1			14
What factors influenced the standards you set?	Not at all Influential 1	2	Moderately Influential 3	4	Very Influential 5	N
The achievement level descriptors	0	0	3	7	4	14
The assessment samples	0	0	0	4	10	14
Other panelists	0	2	5	3	4	14
My experience in the field	0	0	1	2	11	14
	Definitely Yes	Probably Yes	Unsure	Probably No	Definitely No	N
Do you believe the cut scores set by the panel are correctly placed on the exam score scale?	5	6	1			12
Comments:	<ul style="list-style-type: none"> • Yes, to the best of our ability, always chance of error or improved placements. • I think this year is a poor example to use due to poor training and administration of the MAP-A. • We were unsure of the scores assigned; however, if they were in order then we disagreed with the way they were scored. • All scores were discussed. • The group consensus (after discussion) was a good indication of fair standards. 					
How could the standard setting process have been improved?	<ul style="list-style-type: none"> • More careful screening of participants; a few had private agendas. • We had a good facilitator and she added to our process greatly (Kim) helped us think about regular ed. • I think it would benefit the panel to know the scores or place the samples in random order, knowing we were “supposed” to be seeing the lowest to the highest score samples may have changed our view. • Very nicely designed. • More understanding of the special education field. • This was my first experience, but I thought it was effective. 					
For each statement below, please circle the rating that best represents your judgment.	Not at all Useful/Clear 1	2	3	4	Very Useful/Clear 5	N
The opening session was:	0	2	2	4	4	12
The achievement level descriptors were:	0	0	3	7	2	12
Providing additional details to the achievement level descriptors was:	0	0	1	6	4	11
The discussion with other panelists was:	0	0	0	2	10	12

The portfolio rating task was:	0	0	3	4	6	12
The impact data provided prior to the last round of ratings was:	0	0	2	3	7	12
Please provide any additional comments or suggestions about the standard setting process.	<ul style="list-style-type: none"> • It was interesting and a learning tool for me as a teacher that has to do MAP-A. I would like to participate in something like this again. I feel it helps me as a special education teacher. • Kim was a great facilitator. Thanks! 					

Appendix H

Summary of Statistical Results

Table H.1: Communication Arts Raw Score Cuts: Descriptive Statistics

Grade Span	Round	Cut	N	Mean	SD
3-5	2	BB:B	13	19.48	2.25
3-5	2	B:P	13	33.01	1.48
3-5	2	P:A	13	46.20	1.44
3-5	3	BB:B	13	19.67	2.26
3-5	3	B:P	13	33.09	1.36
3-5	3	P:A	13	45.93	1.40
6-8	2	BB:B	13	23.27	2.80
6-8	2	B:P	13	35.30	2.41
6-8	2	P:A	13	45.55	2.35
6-8	3	BB:B	13	25.26	1.83
6-8	3	B:P	13	36.29	2.07
6-8	3	P:A	13	45.30	1.67
11	2	BB:B	13	26.36	3.04
11	2	B:P	13	36.61	2.14
11	2	P:A	13	45.23	1.84
11	3	BB:B	13	26.29	2.27
11	3	B:P	13	37.21	2.57
11	3	P:A	13	45.32	1.32

Table H.2: Mathematics Raw Score Cuts: Descriptive Statistics

Grade Span	Round	Cut	N	Mean	SD
3-5	2	BB:B	13	19.82	3.28
3-5	2	B:P	13	31.42	1.71
3-5	2	P:A	13	44.53	1.89
3-5	3	BB:B	13	20.74	2.56
3-5	3	B:P	13	31.88	1.33
3-5	3	P:A	13	44.48	1.86
6-8	2	BB:B	13	26.19	2.10
6-8	2	B:P	13	31.58	1.44
6-8	2	P:A	13	43.64	1.63
6-8	3	BB:B	14	26.62	1.36
6-8	3	B:P	14	33.29	0.43
6-8	3	P:A	14	45.09	0.85
10	2	BB:B	14	24.01	0.62
10	2	B:P	14	33.72	1.55
10	2	P:A	14	46.00	0.77
10	3	BB:B	14	24.37	1.26
10	3	B:P	14	33.64	0.86
10	3	P:A	14	45.50	0.78

Figure H.1: Communication Arts Impact Data—Round 3 and Smoothed Cuts

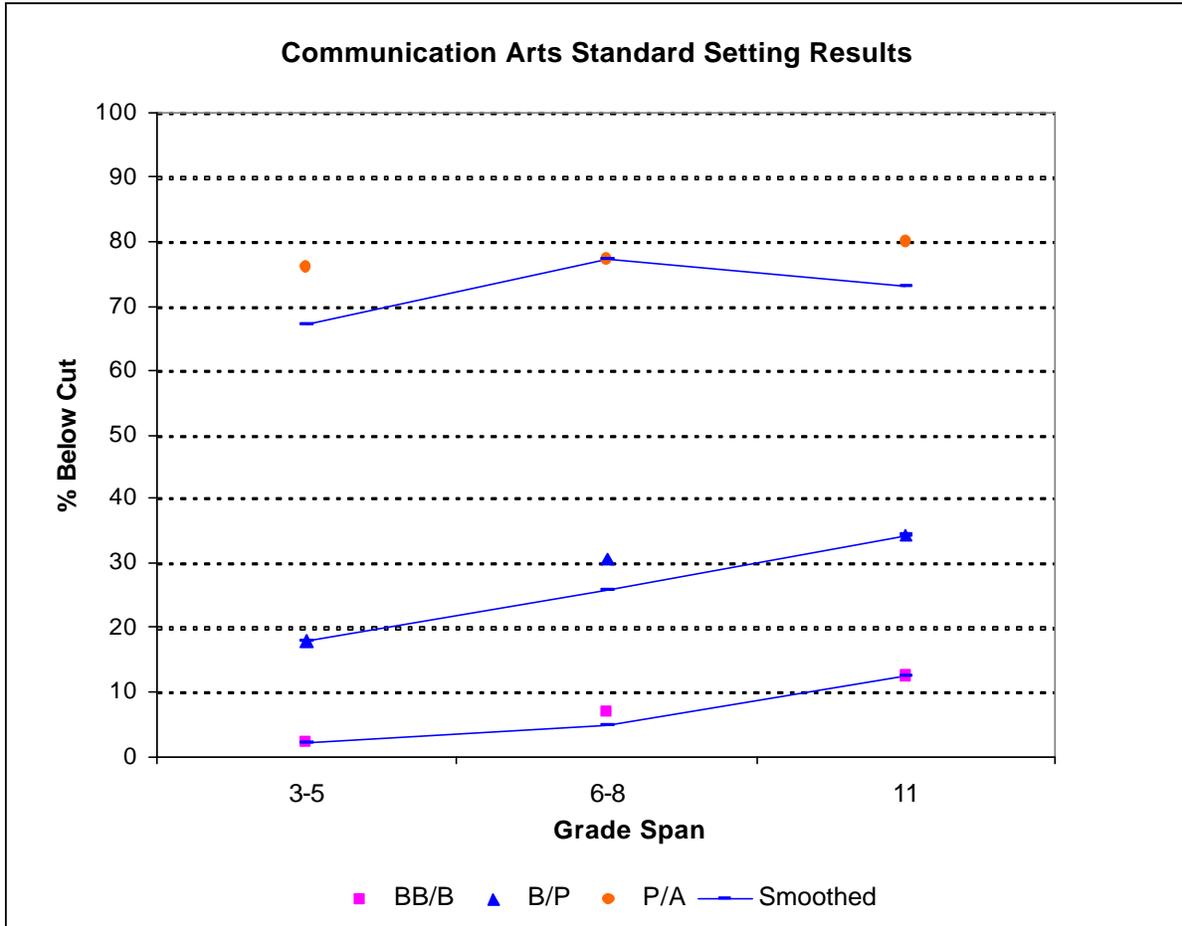


Figure H.2: Mathematics Impact Data—Round 3 and Smoothed Cuts

