

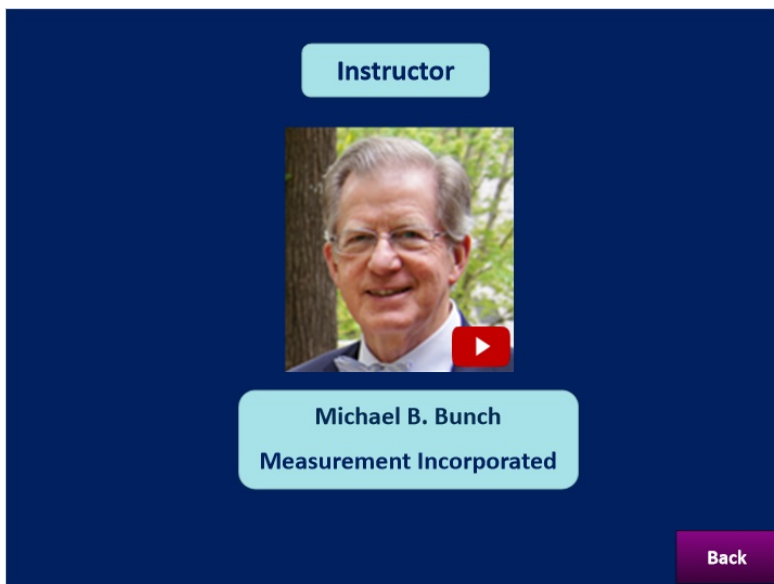
DM14 SLIDES (Standard Setting, Version 1.0)

1. Module Overview

1.1 Module Cover (START)





1.2 Instructor



1.3 Designers

Instructional Designers




Michelle Vanchu-Orosco
Data, Research, &
Evaluation Specialist

André A. Rupp
Mindful Measurement

Back

1.4 Welcome



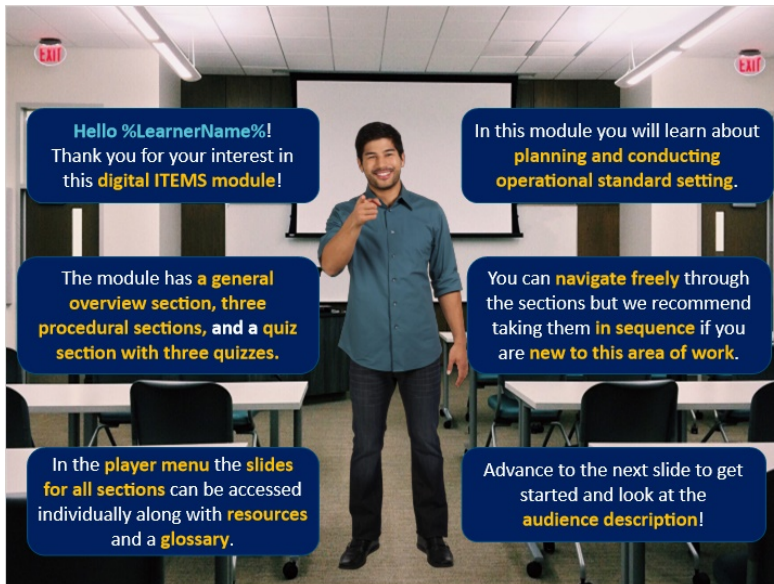
**Welcome to the
ITEMS Module!**

The man to the left is Jet!

Along with the instructor
he will be guiding you through
the module content.

Type your name here:

1.5 Overview




1.6 Target Audience

Target Audience

Anyone who would like a gentle statistical introduction to this topic:

- graduate students and faculty in Master's, Ph.D., or certificate programs
- psychometricians and other measurement professionals
- data scientists / analysts
- research assistants or research scientists
- technical project directors
- assessment developers

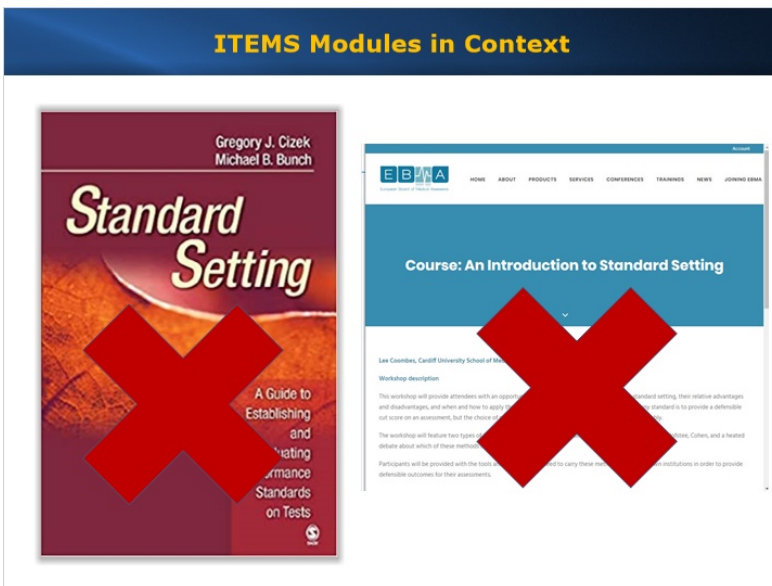


However, we hope that you find the information in this module useful no matter what your official title or role in an organization is!

1.7 Expectations (I)




1.8 Expectations (II)



1.9 Learning Objectives

Learning Objectives




1. Understand roles of policymakers, stakeholders, facilitators, and panelists
2. Understand the flow of activities before, during, and after standard setting
3. Understand scheduling and other logistical requirements
4. Understand communication and documentation requirements

1.10 Prerequisites

Prerequisites

To get the most out of this module it is beneficial to have the following background knowledge:

- Introductory understanding of the concept of standard setting
- Some familiarity with one or more standard setting procedures such as:
 - ✓ **item-centered:** Angoff, Ebel, Nedelsky, Bookmark, ID Matching
 - ✓ **Person-centered:** Borderline Survey, Contrasting Groups

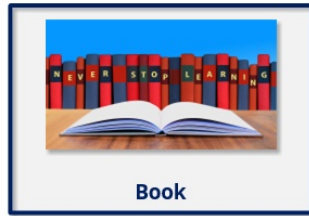


1.11 Resources

Resources

Module Citation

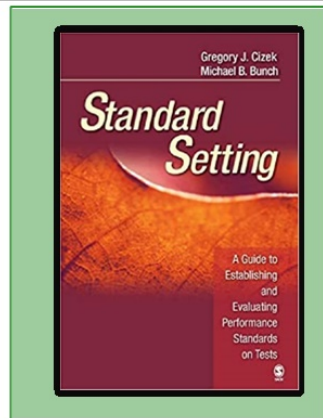
Bunch, M. B. (2020). Planning and conducting standard setting (Digital ITEMS Module 14). *Educational Measurement: Issues and Practice*, 39(2), XX-XX.



Book

References (Slide Layer)

Standard Setting Book



Click on the image to go to the publisher website



Back

1.12 Main Menu





2. Section 1: Conceptual Foundations


2.1 Cover: Overview Section 1



2.2 Overview: SS Learning Objectives





Learning Objectives




1. Understand roles of policymakers, stakeholders, facilitators, and panelists
2. Understand the flow of activities before, during, and after standard setting
3. Understand scheduling requirements
4. Understand communication and documentation requirements


2.3 Overview: SS About



Overview

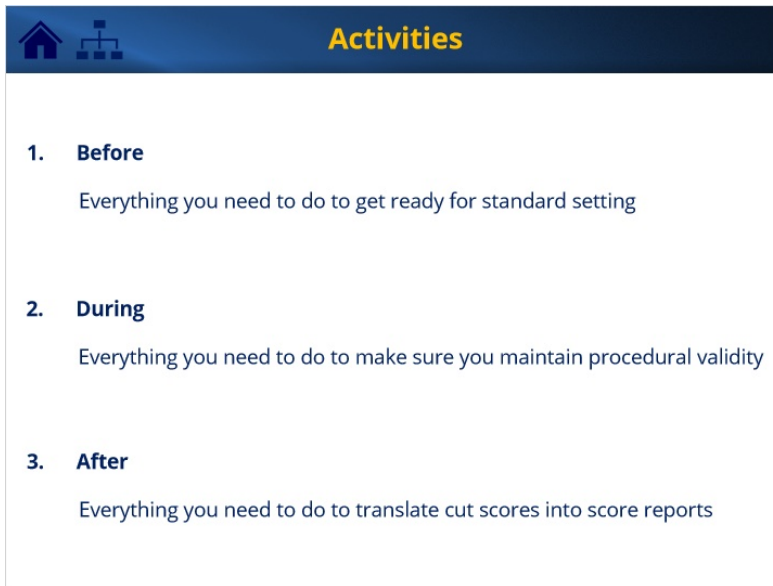
About 

- Planning any standard setting, regardless of method
- Understanding the Who, What, When, Where, and How of standard setting
- Establishing and maintaining procedural validity of any standard setting

Not About 

- A new standard setting procedure
- Any one current standard setting procedure or set of procedures
- Statistical methodology

2.4 Overview: Activities

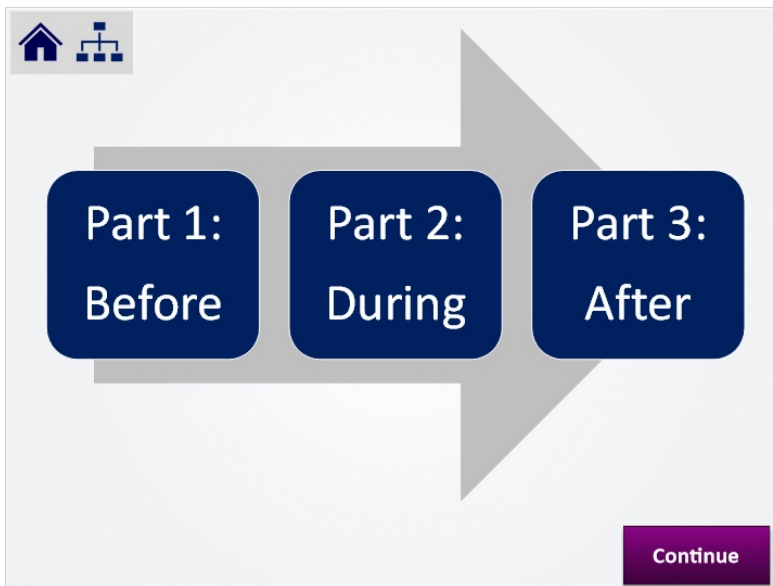


1. Before
Everything you need to do to get ready for standard setting

2. During
Everything you need to do to make sure you maintain procedural validity

3. After
Everything you need to do to translate cut scores into score reports

2.5 Topic Selection: SS Overview



Part 1:
Before

Part 2:
During


Part 3:
After

Continue

2.6 Overview: SS Activity1

Activity 1: Before

- Writing and getting approval for a plan
- Securing staff and panelists
- Creating materials
- Training staff
- Interacting with stakeholders
- Contingency planning
- Logistics




Back

2.7 Overview: SS Activity2

Activity 2: During

- Preliminaries
- Opening day
- Training
- Rounds
- Management



Back

2.8 Overview: SS Activity3

Activity 3: After

- Standard setting report
- Review and approval
- Score reports
- Follow-up activities



Back

2.9 Overview: SS Resources

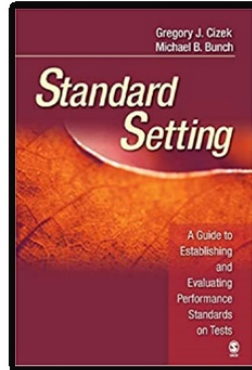
Resources

- 1 Manual
- 4 Worksheets
- 6 PowerPoint presentations
- 7 additional documents
- Links to other documents

Book

Book (Slide Layer)

Standard Setting Book





Click on the image to go to the publisher website



Back

2.10 Overview: SS Manual




Manual & Worksheet 1

Please Open:

- ➔ Manual to "The Plan" on page 6
- ➔ Worksheet 1

The Manual:

- 4 chapters
- Links to reports
- 5 appendices



Worksheet 1

Worksheet 1 (Slide Layer)

Worksheet 1: Planning Template

ReadMe

Who: Get names and contact information of everyone who will be involved in any way in standard setting, from plan review and approval to final cut score review and approval, and everyone in between. Stay in touch on a regular (scheduled) basis.

What: Get a complete list of all the tests and subjects that will require cut scores. How many levels will each one have? How many cut scores will each one need? Are you only to deliver cut scores, or are you expected to deliver something else? If so, what?

When: This tab provides a set of dates and dependencies. If you enter the dates of test administration and score reporting (final) and the number of days required to complete certain activities in between, all the other dates will fill in automatically. Dates and dependencies have been added as examples only. Fill in your own dependencies and test administration and

Where: Use this tab to work through all the logistics of the standard setting site, day by day.

How: Use this tab to prepare an outline and write a plan.

Additional help regarding scheduling, materials, and even presentation tips can be found here:
<https://us.pearson.com/en-us/learn/standard-setting/book/2479366/overview>
Ch. 13 - Cert Scheduling.xls or Ch. 13 - Ed Schedule.xls


Back

2.11 Overview: SS Worksheets





Worksheets

- Worksheet 1_Plan Template
- Worksheet 2_Contingencies
- Worksheet 3_VAC Example
- Worksheet 4_Data Entry



2.12 Overview: SS PowerPoint




PowerPoint Presentations









-  Angoff Overview
-  Board Presentation
-  Body of Work Webinar
-  Conducting Vertical Articulation
-  Generic Opening
-  Generic VAC Webinar

2.13 Overview: SS Additional Docs



Additional Documents

 **Please Open: 4_Bookmark Round 2**

-  1_Designing and Implementing
-  2_Standard Setting Ground Level
-  3_Extended Angoff
-   4_Bookmark Round 2
-  5_VAC Motion Form
-  6_Standard Setting to Go
-  7_Scaling

Worksheet

Worksheet (Slide Layer)

Worksheet: Bookmark Round 2

Cut Score	% At or Above	% in Level
Below Basic	8	98%
Basic	26	88%
Proficient	43	10%
Accelerated	47	1%
Advanced		

Navigation buttons: Back

2.14 Bookend: Section 1 (SS Overview)

This is the end of this section.

Main Menu

3. Section 2: Before

3.1 Cover: Section 2

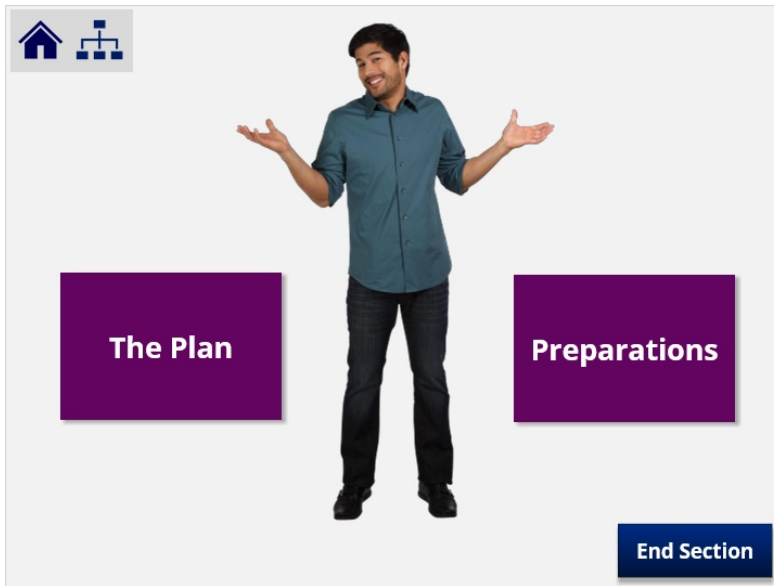


3.2 Before: SS Learning Objectives

Learning Objectives

1. Develop a standard setting plan and get it approved
2. Be aware of all the tasks that must be completed prior to standard setting and how to schedule and complete them

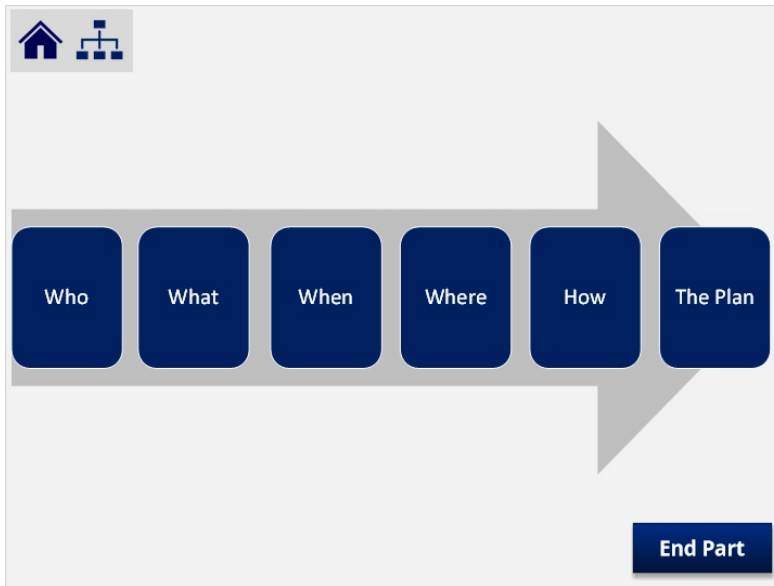
3.3 Topic Selection: SS Before



3.4 Bookmark: SS Before The Plan



3.5 Aspect Selection: SS Before Plan



3.6 Before: SS Plan Element Who

The slide features a dark blue header with a home icon, a tree icon, and the text "Plan Elements: Who". Below the header, there is a red text prompt: "Please Open: Worksheet 1/Who" accompanied by a green Excel icon. A list of five items is displayed on the left, and a small image of a complex structure is on the right. At the bottom, there are two buttons: "Back" and "Worksheet".

- Your staff
- Client staff
- Site staff
- Subcontractors/vendors
- Panelists

[Worksheet](#)

Worksheet (Slide Layer)

Worksheet: Who

Worksheet 1. Standard Setting Plan Template: Who			
Role	Name(s)	Phone	e-mail
1			
2			
3			
4			
5			
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Back

3.7 Before: SS Plan Element What

Plan Elements: What

Please Open: Worksheet 1/What

Tests and Subtests

- How many levels/cuts
- Compensatory/conjunctive cuts
- Vertical articulation

Deliverables

- PLDs/ALDs
- Cut scores
- Final report
- Score reports

Back
Worksheet

Worksheet (Slide Layer)

Worksheet: What

Worksheet 1. Standard Setting Plan Template: What				
1	What test(s) or subtest(s) will you set cut scores on?		Compensatory or Conjunctive? (NA unless setting cut scores on subtests)	Vertical articulation needed?
4	List all tests for which cut scores will be set.	Number of subtests for which cut scores will be set	# of Levels)	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19	What will you deliver?			
20	Deliverable	Yes	No	
21	Activities			
22	Cut scores			
23	Standard setting final report			
24	Score reports			
25	Other (specify)			
26				
27				
28				
29				
30				
31				
32				
33				

Back

3.8 Before: SS Plan Element When

Plan Elements: When

 Please Open: Worksheet 1/ When

Event	Begin	End
First operational administration of the test(s)	4/14/2020	4/30/2020
Approval of standard setting plan	4/4/2020	7/3/2020
Standard setting	7/24/2020	7/26/2020
Review of standard setting report	7/26/2020	8/25/2020
Client review of cut scores	7/26/2020	8/25/2020
Review of cut scores by approval authority	7/27/2020	8/25/2020
Approval of cut scores	8/26/2020	8/26/2020
Cut scores uploaded to score report program	8/26/2020	8/30/2020
Delivery of score reports	8/31/2020	9/1/2020
Dependencies		# Days
Days needed to approve plan		90
Days need to conduct standard setting		3
Days needed to approve cut scores*		30
Days needed to upload cut scores and QA programs		5
Days needed to deliver score reports		2

Back

Worksheet



Worksheet (Slide Layer)

Worksheet: When


Event	Begin	End
First operational administration of the test(s)	4/14/2020	4/30/2020
Approval of standard setting plan	4/14/2020	7/31/2020
Standard setting	7/24/2020	7/26/2020
Review of standard setting report	7/26/2020	8/25/2020
Client review of cut scores	7/26/2020	8/25/2020
Review of cut scores by approval authority	7/27/2020	8/25/2020
Approval of cut scores	8/26/2020	8/26/2020
Cut scores uploaded to score report program	8/26/2020	8/30/2020
Delivery of score reports	8/31/2020	9/1/2020
Fixed dates are in bold.		
Dependencies	# Days	
Days needed to approve plan	90	
Days need to conduct standard setting	3	
Days needed to approve cut scores*	30	
Days needed to upload cut scores and QA programs	5	
Days needed to deliver score reports	2	
Directions		
1. Replace bold dates with actual dates		
2. Replace bold dependencies with actual dependencies.		
Remaining dates will automatically fill in.		
* Factor in any time lag between first reading and second reading/action, which may be 1-2 months.		

Back

3.9 Before: SS Plan Element Where



Plan Elements: Where

 **Please Open: Worksheet 1/Where**

- Exact location of all activities
- Meeting rooms needed, by size, day, and function
- Configuration of meeting rooms
- Sleeping rooms needed, by day (including special needs)
- Other rooms needed (e.g., office, conference)
- Meals needed, by day (including special needs)
- Meeting flow, by day
- Other services needed, by day and room/area (e.g., audiovisual, internet, transportation)

Back Worksheet

Worksheet (Slide Layer)

Worksheet: Where

Back

3.10 Before: SS Plan Element How

Plan Elements: How

Please Open: Worksheet 1/How

- Procedure (e.g., Body of Work, Modified Angoff, Bookmark)
- Software
- Panelist recruitment and deployment
- Training activities
- Data analysis activities
- Feedback
- Calculation of cut scores
- Other procedures (e.g., PLD development, vertical articulation)
- Cut score approval process

Back

Worksheet

Worksheet (Slide Layer)

Worksheet: How

Worksheet 1. Standard Setting Plan Template: How		
Proposed Methodology (name of procedure(s); be specific)		
Will you be using the same procedure for each test? (Circle or highlight one.)	Yes	No
If you indicated No , which procedure will you use for each test?		
What software package(s) will you be using?		
What data will you use, and how will you obtain those data?		
How will you recruit and select panelists?		
How will you train panelists?		
How will you schedule activities?		
How will you conduct each round?		
How will you analyze data between rounds?		
How will you present feedback to panelists?		
How will you calculate final cut scores?		
Will you conduct vertical articulation?	Yes	No
If Yes, how will you select panelists and conduct vertical articulation?		
If Yes, how will you conduct vertical articulation?		
Will you be involved in presenting results to the approving authority (either in person or in a behind-the-scenes supporting role)?	Yes	No
If Yes, what will your role be, and how will you prepare for that role?		
What else do you need to do after approval of cut scores (e.g., technical report, scaling).		
Use your responses above to write out a complete plan.		


Back

3.11 Before: SS Plan Outline



Plan Outline


Please Open:
Planning and Conducting Standard Setting, pp. 8-14

- Cover
- Table of Contents
- Purpose/Background
- Methodology
- Hardware and software
- Timeline
- On-Site Agenda
- Round-by-Round Description of Activities
- Data Analysis Procedures
- Sample Feedback
- Follow-Up Activities
- References
- Appendices



3.12 Before: SS Performance Level Descriptors

  **Performance Level Descriptors**

 **Please Open:**

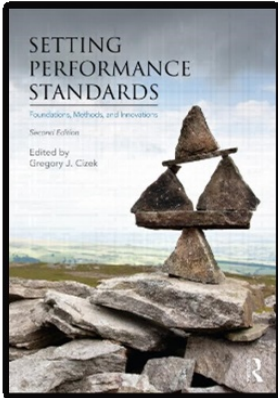
- ➔ *Planning and Conducting Standard Setting*, pp. 14-16
- ➔ See also Egan, Schneider, & Ferrara (2012, p. 93)


Types <ul style="list-style-type: none">▪ Policy▪ Range▪ Target▪ Reporting	Development <ul style="list-style-type: none">▪ Drafting▪ Review▪ Approval	Articulation
--	---	---------------------

[Reference](#)

Reference (Slide Layer)



Reference




[Click on the image to go to the publisher website](#) 


[Back](#)

3.13 Before: SS Online Special Requirements

  **Online Standard Setting**

 **Please Open:**
Planning and Conducting Standard Setting, pp. 16-21

- Minimize differences between paper and online
- Maintain security
- Give clear directions
- Give clear feedback
- Eliminate downtime
- Maintain technical support



3.14 Before: SS Plan Approval 1

  **Plan Approval**

 **Please open:**
Planning and Conducting Standard Setting, pp. 21-25

Identify the plan approvers

K-12 Setting	Certification & Licensure Setting
State or Local Board of Education	Board of Directors/Trustees
Superintendent/Commissioner	Executive Director
Assistant Superintendent/ Commissioner	Assistant Director
Assessment Director	Director of Testing/Psychometrics
Assessment Department Staff	Psychometrician(s)
Technical Advisory Committee	External Reviewers
External Reviewers	

3.15 Before: SS Plan Approval 2

Plan Approval (cont.)

Please Open: *Worksheet 2 Contingencies*

- Identify the approval process
- Follow it
- Be prepared for revisions
- Plan for contingencies

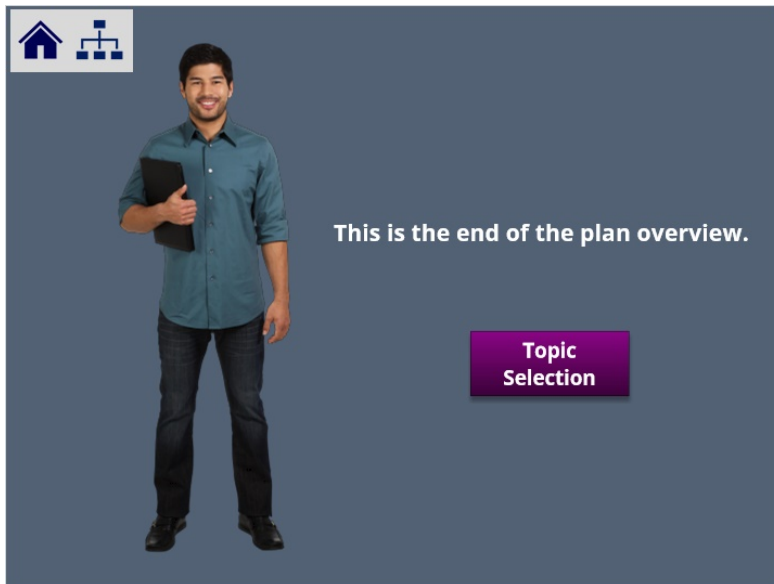
Worksheet (Slide Layer)

Worksheet: Contingencies

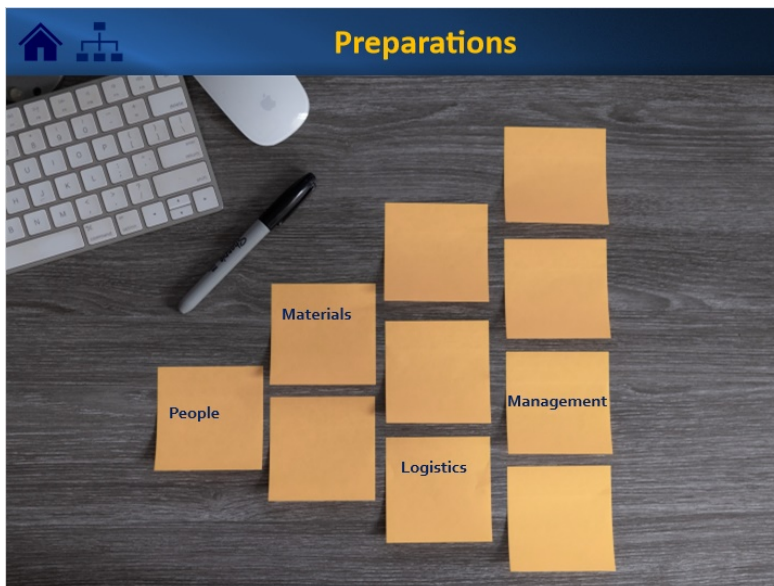
Standard Setting Contingency Planning Things That Go Bump in the Night (and Day)		
Standard setting, the any human activity, is subject to any number of things that can throw it off balance. Develop a contingency plan in concert with your client, and keep it handy. This table will help you do that. Add to it as necessary.		
Contingency	Threat	Mitigation
Panelist <i>Reloed</i>		
Panelists <i>don't</i> show up.	Procedural validity may be called into question.	Determine absolute minimum panel size; oversample by 10-20%.
Panelists arrive late.	If they miss training, procedural validity may be called into question.	Depending on how late, provide independent training. If a day or more late, send them home; see above re oversampling.
Panelists leave early.	Procedural validity may be called into question.	Determine absolute minimum panel size; oversample by 10-20%. Confer with your client re using those panelists' data.
Panelist mix is not representative.	Procedural validity may be called into question.	In defining the target mix, make sure to get a +/- for every group. See above re oversampling.
Panelists <i>can't</i> or won't follow directions.	Procedural validity may be called into question.	Facilitators should escalate this to the workshop leader, who will retain the panelist(s). If the problem persists, the workshop leader should escalate this to the client representative in charge, who will determine whether to send the panelist home or possibly disregard all data from that panelist.
Panelists dominate.	One panelist who dominates a table or room can artificially raise or lower cut scores, calling the entire process into question. [This might also apply to a client representative.]	Facilitators should be trained to spot such panelists and channel their comments by asking other panelists to speak up. If the problem persists, the facilitator should escalate the matter to the lead facilitator who will counsel

Back

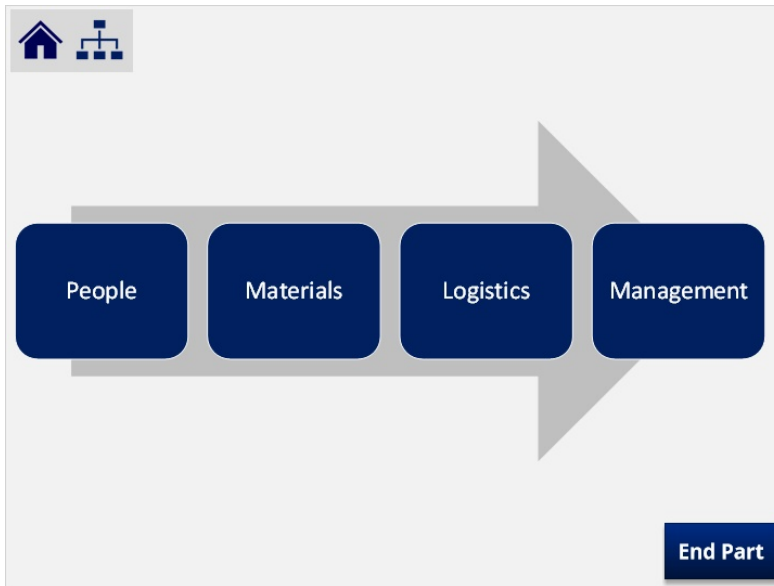
3.16 Bookend: SS Before The Plan



3.17 Bookmark: SS Before Preparations



3.18 Aspect Selection: SS Before Preparations



3.19 Before: SS People

The slide is titled 'People' and features a dark blue header with a home icon and a tree icon on the left. Below the header, there is a red book icon followed by the text 'Please Open:'. Two red arrows point to the right, indicating references: 'Planning and Conducting Standard Setting, pp. 26-41' and 'Appendices A and D'. A horizontal line separates this section from a list of staff categories, each in a light blue box with a dark blue border:

- Panelists
 - How many? What assortment? How to recruit?
- Your staff
 - Project manager, lead facilitator, facilitators, data entry staff, support staff
- Site staff
 - Hotel manager, banquet manager
- Sponsoring agency staff
 - Main contact, support staff
- Others
 - Vendors, subcontractors

A purple 'Back' button is located in the bottom right corner of the slide content area.



3.20 Before: SS Logistics



3.21 Before: SS Materials Equipment



3.22 Before: SS Data Entry 1

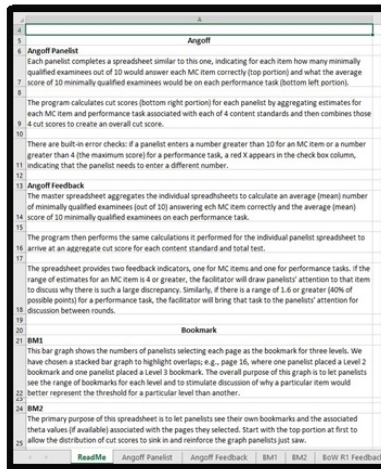
 Data Entry

- What will panelists do?
- What data will they create?
- How will you capture their data?
- What will you do with their data?
- What feedback will you produce?

Worksheet

Worksheet (Slide Layer)

Worksheet: Data Entry

Back

3.23 Before: SS Data Entry 2

🏠
Data Entry (cont.)

📄 **Please Open: Worksheet 4 Data Entry**

Results of Round 1 of Bookmark Rating

Rater	Level 2		Level 3		Level 4	
	Page	RP67	Page	RP67	Page	RP67
1	11	0.273	27	0.900	36	1.200
2	9	0.193	23	0.616	31	0.998
3	13	0.420	25	0.810	27	0.900
4	9	0.193	25	0.810	40	1.489
5	12	0.286	26	0.890	38	1.333
6	7	-0.032	20	0.569	33	1.090
13	10	0.273	16	0.493	35	1.191
14	17	0.273	23	0.616	33	1.090
15	14	0.440	26	0.890	39	1.340
Median	11	0.273	24	0.740	38	1.333
Min	7	-0.032	16	0.493	27	0.900
Max	17	0.493	31	0.998	41	1.510
Range	10	0.525	15	0.505	14	0.610

3.24 Before: SS Feedback



3.25 Before: SS Management

Management

- Plan revisions
- Staff training
- Communication
 - ✓ With agency
 - ✓ With panelists
 - ✓ With site
 - ✓ With vendors
 - ✓ Frequency
 - ✓ Type

Project

Back

3.26 Bookend: Section 2 (SS Before)

This is the end of this section.

Quiz Main Menu

4. Section 3: During

4.1 Cover: Section 3

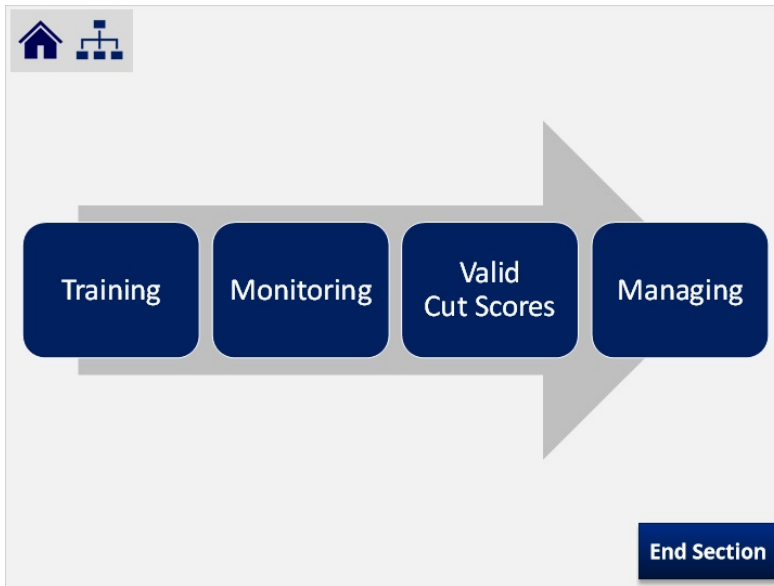


4.2 During: SS Learning Objectives

Learning Objectives

1. Learn how to train panelists
2. Learn how to monitor panelists and facilitators
3. Learn how to obtain valid cut scores
4. Learn how to manage all standard setting activities

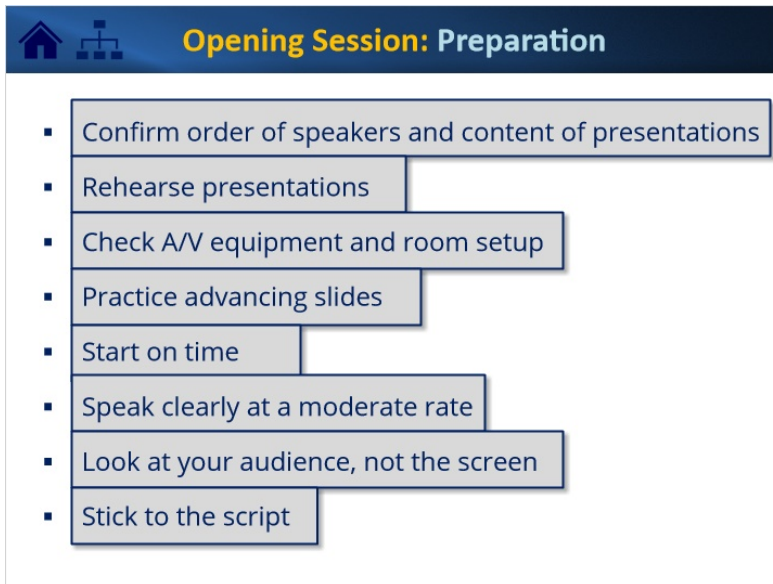
4.3 Topic Selection: SS During



4.4 Bookmark: Training



4.5 During: SS Opening Session Preparation



The slide features a dark blue header with a home icon, a tree icon, and the title "Opening Session: Preparation" in yellow and white. Below the header is a list of eight items, each in a light blue box with a dark blue border. The items are:

- Confirm order of speakers and content of presentations
- Rehearse presentations
- Check A/V equipment and room setup
- Practice advancing slides
- Start on time
- Speak clearly at a moderate rate
- Look at your audience, not the screen
- Stick to the script

4.6 During: SS Opening Session Content



The slide features a dark blue header with a home icon, a tree icon, and the title "Opening Session: Content" in yellow and white. Below the header is a list of seven items, each in a light blue box with a dark blue border. The items are:

- Purpose of this meeting
- Why they are there
- Overview of agenda
- Ground rules
- Introduction of other staff
- Introduction of facilitators
- Directions to breakout rooms

In the bottom right corner of the slide content area, there is a purple button with the text "Test Details" in white.

Additional (Slide Layer)

Opening Session: Test Details

- Overview of test(s)
- Overview of performance levels
- Overview of standard setting procedure
- Overview of additional training sessions

Back

4.7 During: SS Opening Session FollowUp






Opening Session: Follow-Up



- Debrief with sponsoring agency
- Review remainder of Day 1 activities



4.8 During: SS Training on Tests

  **Training on the Test(s)**

 **Please Open:**
Planning and Conducting Standard Setting, Appendix C

- Led by facilitators
- May include comments by agency staff
- Objective is to see tests as test takers see them
- Focus on test items and difficulty
- May include taking and scoring the test(s)
- Assessment of understanding



4.9 During: SS Training on PLDs

  **Training on the PLDs**

Objective: Internalize Descriptors

- Similar in setup to training on the test
- Led by facilitators
- May include comments by agency staff
- Focus
 - ✓ Range of performance within each level
 - ✓ Just barely vs. typical
- Panelist discussion of their interpretations
- Q&A session
- Assessment of understanding

4.10 During: SS Training on Procedure





Training on the Procedure

Objective: Learn how to Apply Procedure

- Led by lead facilitator
- Practice sessions led by individual facilitators
- Content
 - ✓ Recap of training on tests and PLDs
 - ✓ Principles of the standard setting procedure
 - ✓ Tasks panelists will perform
 - ✓ What those tasks produce
 - ✓ Reference to software (if any)
 - ✓ How panelist activity will be translated into cut scores
 - ✓ The iterative nature of the process
 - ✓ Nature and expected outcomes of each round
 - ✓ Ground rules

4.11 During: SS Practice Procedure

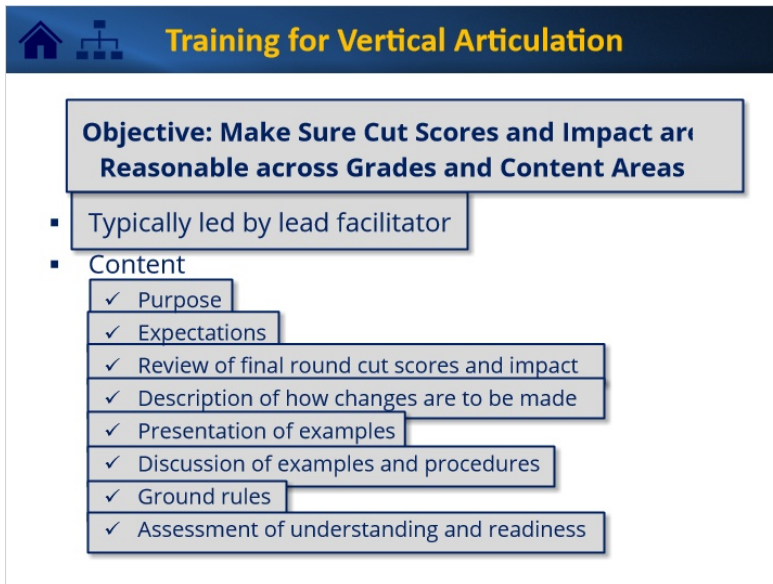


Practice with the Procedure

Objective: Verify Panelist Understanding of Procedures

- Led by facilitators in breakout rooms
- Recap of lead facilitator comments
- (Demonstration of software features)
- Q&A session
- Introduction of practice exercise
- Group practice on one or two items or work samples
- Individual completion of brief exercise
- Discussion of individual results
- Assessment of understanding and readiness

4.12 During: SS Training Vertical Articulation

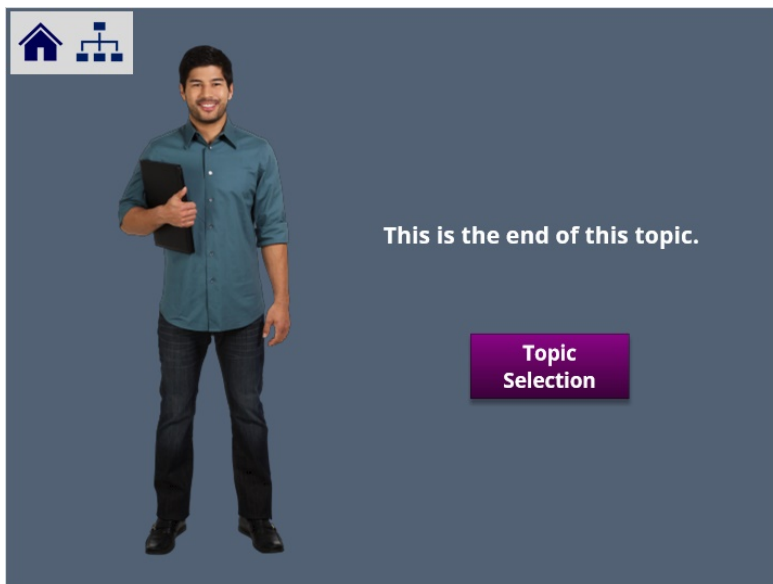


Training for Vertical Articulation

Objective: Make Sure Cut Scores and Impact are Reasonable across Grades and Content Areas

- Typically led by lead facilitator
- Content
 - ✓ Purpose
 - ✓ Expectations
 - ✓ Review of final round cut scores and impact
 - ✓ Description of how changes are to be made
 - ✓ Presentation of examples
 - ✓ Discussion of examples and procedures
 - ✓ Ground rules
 - ✓ Assessment of understanding and readiness

4.13 Bookend: SS During Training



This is the end of this topic.

Topic Selection

4.14 Bookmark: Monitoring

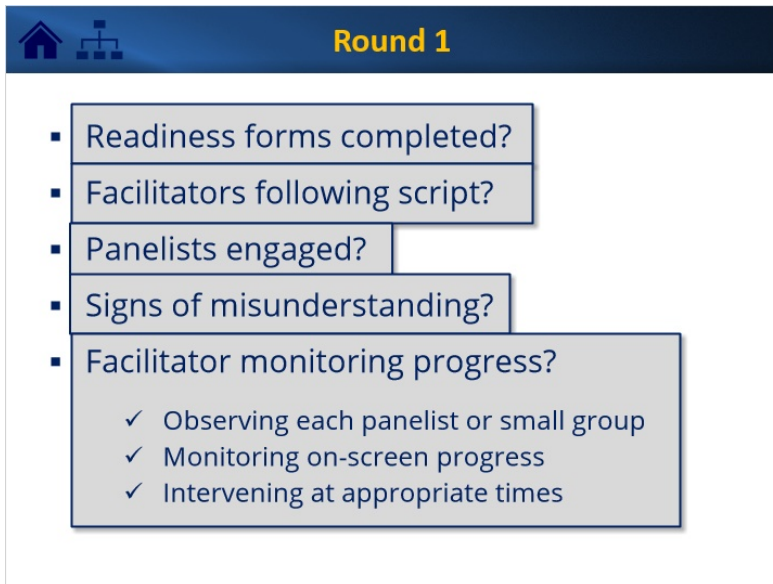


4.15 During: SS Training Activities

A slide titled "Training Activities" with a dark blue header. The header contains a home icon and a tree diagram icon on the left, and the text "Training Activities" in yellow on the right. Below the header, there is a red book icon followed by the text "Please Open: Planning and Conducting Standard Setting, Appendix B". A horizontal line separates this from a list of four items, each in a light blue box with a dark blue border:

- Facilitators following script?
- Panelists engaged?
- Signs of misunderstanding?
- Readiness forms completed?

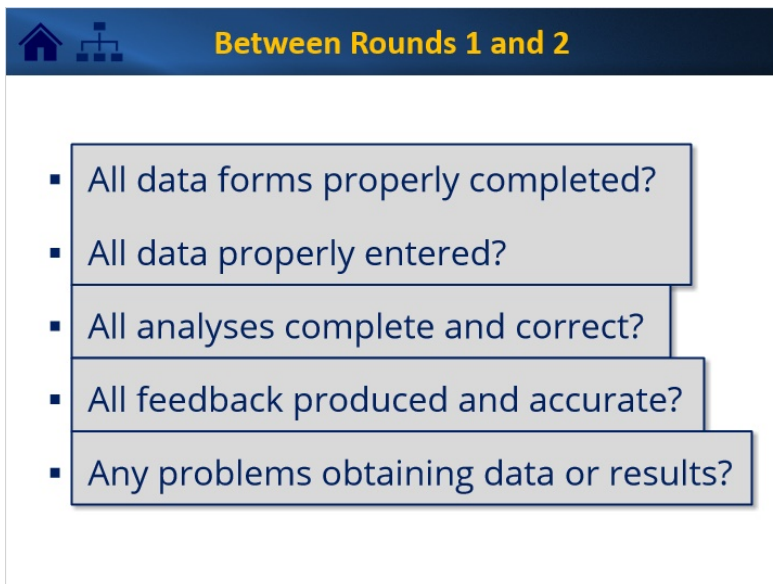
4.16 During: SS Round 1



Round 1

- Readiness forms completed?
- Facilitators following script?
- Panelists engaged?
- Signs of misunderstanding?
- Facilitator monitoring progress?
 - ✓ Observing each panelist or small group
 - ✓ Monitoring on-screen progress
 - ✓ Intervening at appropriate times



4.17 During: SS Btwn R1 R2



Between Rounds 1 and 2



- All data forms properly completed?
- All data properly entered?
- All analyses complete and correct?
- All feedback produced and accurate?
- Any problems obtaining data or results?

4.18 During: SS Round 2

 **Round 2**



- Facilitators following script?
- Readiness forms completed?
- Signs of misunderstanding?
- Panelists engaged?
- Facilitator monitoring progress?
 - ✓ Observing each panelist or small group
 - ✓ Monitoring on-screen progress
 - ✓ Intervening at appropriate times

4.19 During: SS Btwn R2 R3

 **Between Rounds 2 and 3**



- All data forms properly completed?
- All data properly entered?
- All analyses complete and correct?
- All feedback produced and accurate?
- Any problems obtaining data or results?

4.20 During: SS Round 3

 **Round 3**

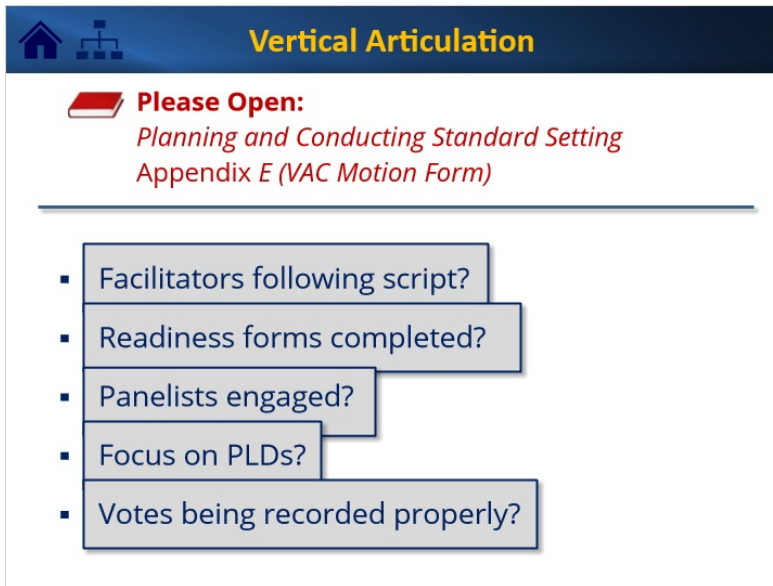
- Facilitators following script?
- Readiness forms completed?
- Panelists engaged?
- Signs of misunderstanding?
- Facilitator monitoring progress?
 - ✓ Observing each panelist or small group
 - ✓ Monitoring on-screen progress
 - ✓ Intervening at appropriate times

4.21 During: SS Btwn R3 Vertical Articulation

 **Between Round 3 and Vertical Articulation**

- All data forms properly completed?
- All data properly entered?
- All analyses complete and correct?
- All feedback produced and accurate?
- Any problems obtaining data or results?

4.22 During: SS Vertical Articulation

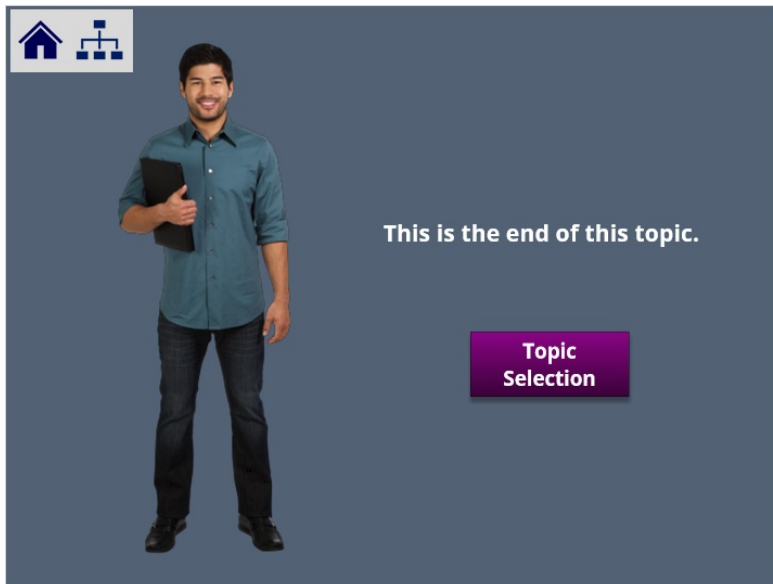


Vertical Articulation

Please Open:
*Planning and Conducting Standard Setting
Appendix E (VAC Motion Form)*

- Facilitators following script?
- Readiness forms completed?
- Panelists engaged?
- Focus on PLDs?
- Votes being recorded properly?

4.23 Bookend: SS During Monitoring

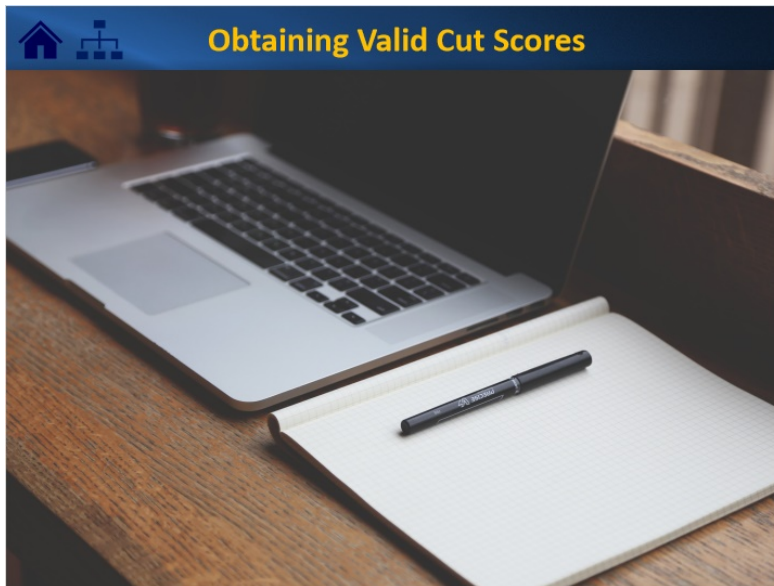


Vertical Articulation

This is the end of this topic.

Topic Selection

4.24 Bookmark: Valid Cut Scores




4.25 During: SS Follow Script

A slide titled "Follow the Script" with a dark blue header. The header contains a home icon and a tree diagram icon on the left, and the title text in yellow on the right. Below the header, there is a red book icon followed by the text "Please Open:" and "Planning and Conducting Standard Setting, Appendix B" in red. A horizontal line separates this from a list of four bullet points, each enclosed in a light blue box:

- Train facilitators thoroughly
- Conduct dry runs or field tests
- Go over next day's events after debriefing
- Stay on schedule


4.26 During: SS Monitor



Monitor

- Know what each participant is supposed to do
- Know what each participant is actually doing
- Correct problems as they occur
- Give feedback quickly and accurately

4.27 During: SS RoundXRound Tips



Round-by-Round Tips

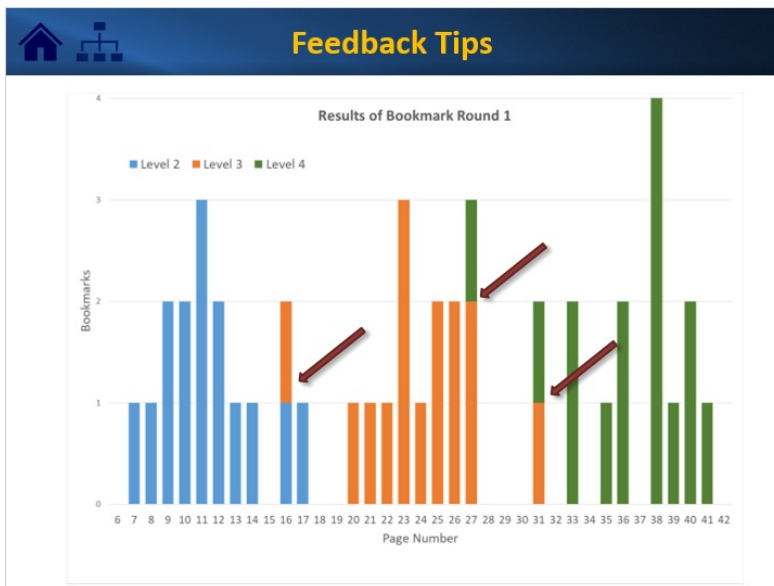
- Disagreements are OK (and expected)
- All voices are heard
- No one dominates
- All decisions must be PLD-based
- Each panelist enters his or her own judgment
- Trust but verify

4.28 During: SS InterRound Tips

Inter-Round Tips

- Check completeness of each entry
- Run dummy data to validate programs
- Have 2 people check data entry and analysis
- Share cut scores and impact data with sponsoring agency

4.29 During: SS Feedback Tips



4.30 During: SS Vertical Articulation Tips 1

Vertical Articulation Tips

Please Open: *Worksheet 3 VAC Example*

Grade	Level 2 (%)	Level 3 (%)	Level 4 (%)
3	70	42	10
4	72	38	8
5	70	40	5
6	55	25	5
7	75	42	5
8	75	38	5

Worksheet

Worksheet (Slide Layer)

Worksheet: Vertical Articulation

ReadMe

This generic VAC workbook illustrates the use of information from the final round of standard setting employing an RT model. It can even be modified to work with cut scores.

The Theta tab shows the page number to theta conversion as well as the percentages of students scoring at or above each theta level. For a Bookmark procedure, this theta would be the RT67 value for each item. For a Body of Work procedure, this would be the theta.

Each grade level in the Theta tab has two values: theta and % of students scoring at or above that value.

The VAC tab contains a table in 3 sections and a graph.

The first (left) section of the table shows the OIB page number associated with the cut score from the final round of standard setting.

The second (middle) section of the table shows the percentages of students at or above the theta cuts shown in the first section. It is based on a set of source tables associating the theta cut in the first section with the appropriate data set in the Theta tab. The

The third (right) section of the table uses the entries of the middle section to show the percentages of students in each level, based on the theta cuts in the first section.

The graph at the bottom of the page is based on the middle section of the table above.

Put a page number in the first section, and change it. For example, change the Round 3 bookmark for Grade 5 Level 3 from 32 to 45, and see what happens. You will notice that the percentages in the second and third sections of the table change, and the Level 3 line in the graph transmitters out between grades 4 and 6.

Change any other page number in the first section of the table, and you will notice changes in both the other sections and the graph.

In practice, you may use a workbook such as this one, preloaded with all OIB page numbers, theta values, and associated percentages of students scoring at or above those values. Show the VAC tab to parents and identify data points on the graph that seem inconsistent with the overall system: constant, generally declining, or generally



The Locked tab contains the original tables and does not change, regardless of what you do in the VAC tab. It is a safety device to prevent accidental changes to the cut scores. At the end of the VAC meeting, all cut scores for which there is not a valid change (with motion, second, and 2/3 majority approval) should be the same as when you started.

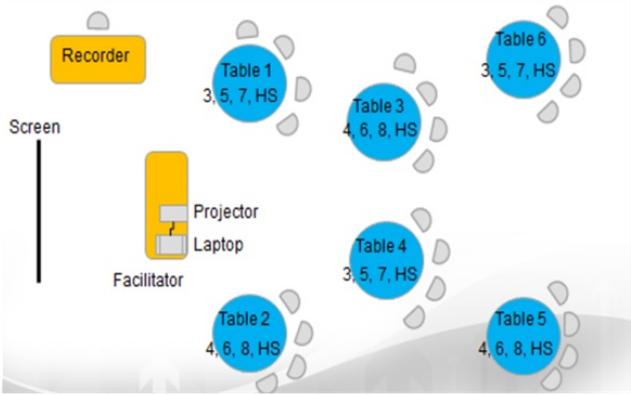
Caution: The purpose of vertical moderation is to arrive at a set of scores that make sense and can be defended, not to make all the lines in the graph perfectly straight. There will be times when there will still be bumps or dips in one or more of the lines when vertical moderation has been completed. In those instances, there should be a well documented reason for each significant bump or dip.

ReadMe
Theta
VAC
Locked

Back



4.31 During: SS Vertical Articulation Tips 2

  **Vertical Articulation Tips (cont.)**





Use Robert's Rules with 2/3 Majority

4.32 During: SS Work With Panelists


  **Work With Panelists**

- Get to know them
- Value and empower them
- Listen to their concerns
- Explain concepts as often as necessary
- Let other panelists help
- Assess understanding and readiness

4.33 During: SS Work With One Another

  **Work With One Another**

- Collegial, not adversarial
- Discuss and resolve problems as they arise
- Maintain a positive atmosphere
 - ✓ Take care of panelists
 - ✓ Take care of facilitators and support staff



4.34 Bookend: SS During CutScores



This is the end of this topic.

Topic Selection

4.35 Bookmark: Managing



4.36 During: SS Division Responsibilities

A slide titled "Division of Responsibilities" with a dark blue header. The header contains a home icon, a tree icon, and the text "Division of Responsibilities" in yellow. The main content area features a bulleted list of roles, each in a separate box:

- Project Manager/On-Site Coordinator
- Lead Facilitator
- Sponsoring Agency Lead
- Official Reviewer

In the bottom right corner, there is a circular icon showing a globe with silhouettes of people.

4.37 During: SS Project Manager OnSite

Project Manager/On-Site Coordinator

Please Open: Worksheet 2 Contingencies

- Meeting rooms
- Guest rooms
- Meals
- Security
- Contingency management
- Panelist emergencies
- General emergencies
- Coordinating with site management and staff
- Supervising clerical support staff
- Participating in and documenting daily debriefing

Worksheet

worksheet (Slide Layer)

Worksheet: Contingencies

Standard Setting Contingency Planning
Things That Go Bump in the Night (and Day)

Standard setting, like any human activity, is subject to any number of things that can throw it off balance. Develop a contingency plan in concert with your client, and keep it handy. This table will help you do that. Add to it as necessary.

Contingency	Threat	Mitigation
Panelist Related		
Panelists don't show up.	Procedural validity may be called into question.	Determine absolute minimum panel size; oversample by 10-20%.
Panelists arrive late.	If they miss training, procedural validity may be called into question.	Depending on how late, provide independent training. If a day or more late, send them home; see above re oversampling.
Panelists leave early.	Procedural validity may be called into question.	Determine absolute minimum panel size; oversample by 10-20%. Confer with your client re using those panelists' data.
Panelist mix is not representative.	Procedural validity may be called into question.	In defining the target mix, make sure to get a +/- for every group. See above re oversampling.
Panelists can't or won't follow directions.	Procedural validity may be called into question.	Facilitators should escalate this to the workshop leader, who will retrain the panelist(s). If the problem persists, the workshop leader should escalate this to the client representative in charge, who will determine whether to send the panelist home or possibly disregard all data from that panelist.
Panelists dominate.	One panelist who dominates a table or room can artificially raise or lower cut scores, calling the entire process into question. (This might also apply to a client representative.)	Facilitators should be trained to spot such panelists and channel their comments by asking other panelists to speak up. If the problem persists, the facilitator should escalate the matter to the lead facilitator who will counsel

Back

4.38 During: SS Lead Facilitator

  **Lead Facilitator**

 **Please Open: *Worksheet 2 Contingencies***

- Monitoring breakout sessions
- Leading daily debriefing
- Contingency management
- Supervising facilitators
- Supervising data entry staff
- Supervising technical support staff
- Recommending deviations from approved plan
- Recommending solutions to problems
- Documenting the entire process and results

4.39 During: SS Agency Lead

  **Sponsoring Agency Lead**

- Monitoring project manager and lead facilitator
- Monitoring breakout sessions
- Participating in daily debriefing
- Answering policy-related questions
- Approving deviations from approved plan
- Approving solutions to problems

4.40 During: SS Official Reviewer



  **Official Reviewer**

- Monitoring project manager and lead facilitator
- Monitoring breakout sessions
- Documenting observations
- Giving timely feedback

If you *see* something, *say* something

- Participating in daily debriefing

4.41 During: SS Prelim OnSite

  **Preliminaries: On Site**



Prior to Day 1

- Check in with site staff
- Check on arrivals
- Meet with staff
- Check meeting rooms

Morning of Day 1

- Check opening session meeting room
- Check opening session A/V
- Meet with all speakers

4.42 During: SS Prelim Remote

  **Preliminaries: Remote**



Prior to Day 1

- Confirm panelist participation
- Meet with all key staff
- Check webinar software
- Check standard setting software


Morning of Day 1

- Recheck opening session webinar and notes
- Alert tech support

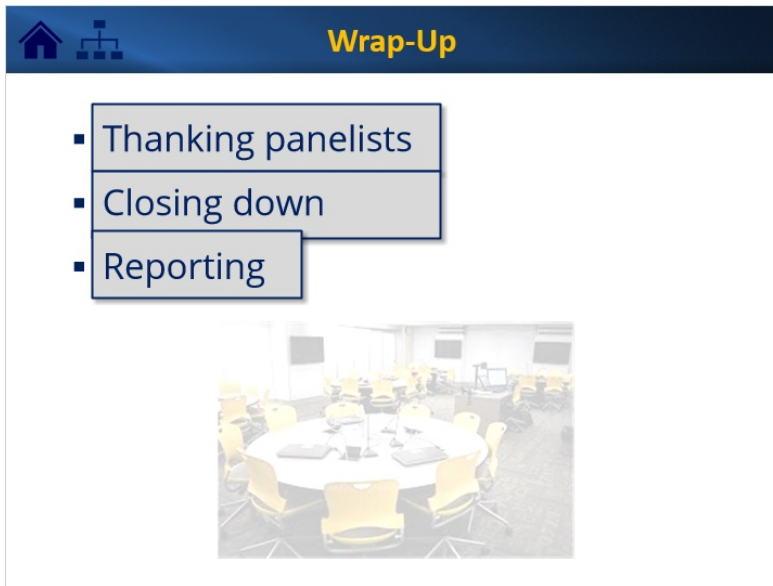
4.43 During: SS Daily

  **Daily**

- Monitoring
- Problem resolution
- Debriefing




4.44 During: SS WrapUp

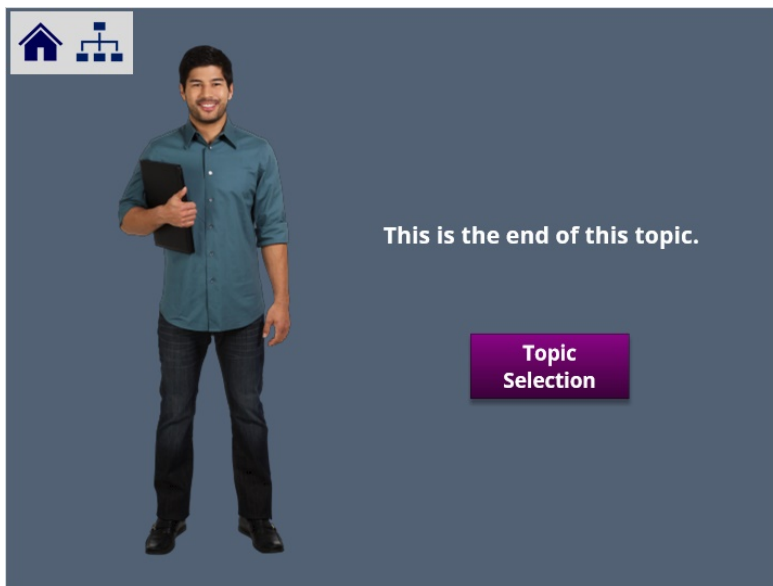


Home icon | Organization chart icon | **Wrap-Up**


- Thanking panelists
- Closing down
- Reporting



4.45 Bookend: SS During Managing



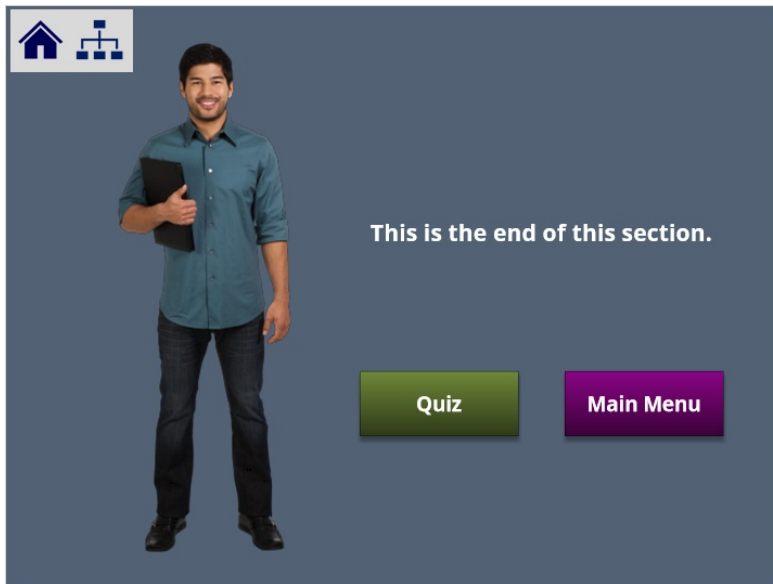
Home icon | Organization chart icon



This is the end of this topic.

Topic Selection

4.46 Bookend: Section 3 (SS During)



5. Section 4: After

5.1 Cover: Section 4



5.2 After: SS Learning Objectives



The slide features a dark blue header with a home icon and a tree icon on the left, and the text "Learning Objectives" in yellow on the right. Below the header is a target icon with an arrow in the center. Underneath the target are three light blue rectangular boxes, each containing a numbered step:

1. Write a final report
2. Get cut scores approved
3. Complete additional activities

5.3 Topic Selection: SS After



The slide features a light gray background with a dark blue header containing a home icon and a tree icon. Below the header are three dark gray rectangular boxes with green borders, each containing a topic name:

- Final Report
- Approve Cut Scores
- Other Activities

In the bottom right corner, there is a dark blue button with the text "End Section" in white.

5.4 Bookmark: Final Report



5.5 After: SS Final Report Outline

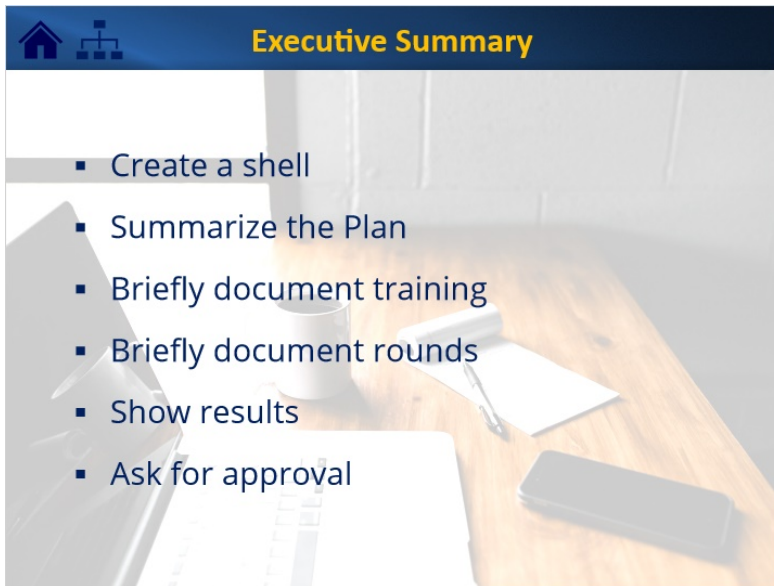
A screenshot of a presentation slide. The slide has a dark blue header with a home icon and a tree diagram icon on the left, and the text "Final Report Outline" in yellow on the right. Below the header, there is a red book icon followed by the text "Please Open: Planning and Conducting Standard Setting (p. 61) - Links". A horizontal line separates this from the main content. On the left, there is a list of report sections. On the right, there is a thumbnail image of the report cover.

Please Open:
Planning and Conducting Standard Setting (p. 61) - [Links](#)

- Title Page
- Table of Contents
- Executive Summary
- Introduction
- Methodology
- Round-by-Round Summary
- Results
 - ✓ Cut scores
 - ✓ Impact
- Recommendations
- References
- Appendices

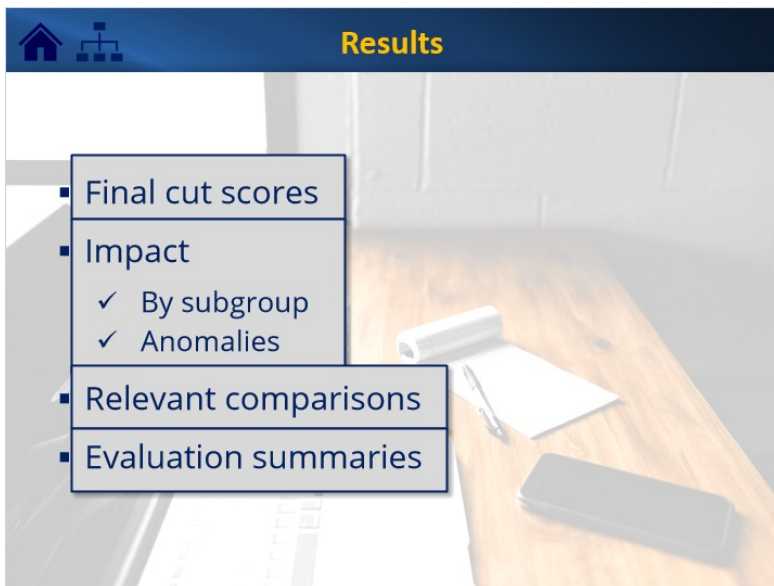
Planning and Conducting Standard Setting
Michael B. Bunch
April 17, 2020
MI MEASUREMENT INCORPORATED

5.6 After: SS Executive Summary



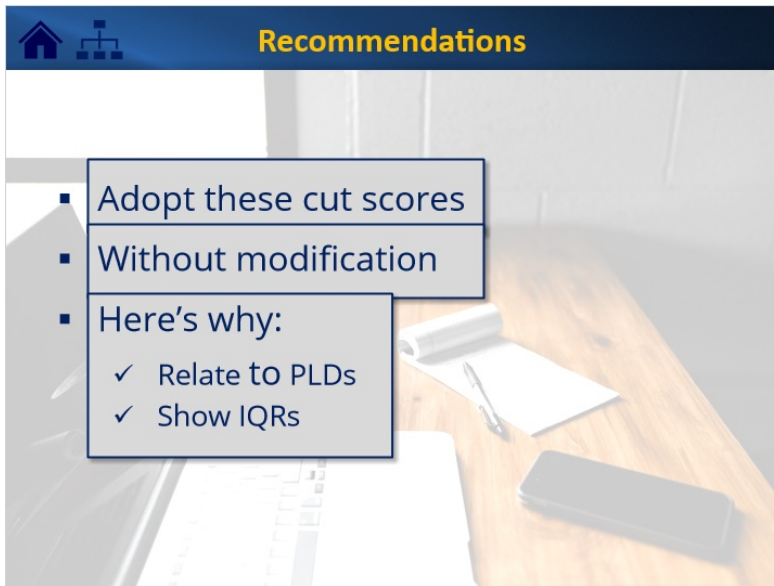
- Create a shell
- Summarize the Plan
- Briefly document training
- Briefly document rounds
- Show results
- Ask for approval

5.7 After: SS Results



- Final cut scores
- Impact
 - ✓ By subgroup
 - ✓ Anomalies
- Relevant comparisons
- Evaluation summaries

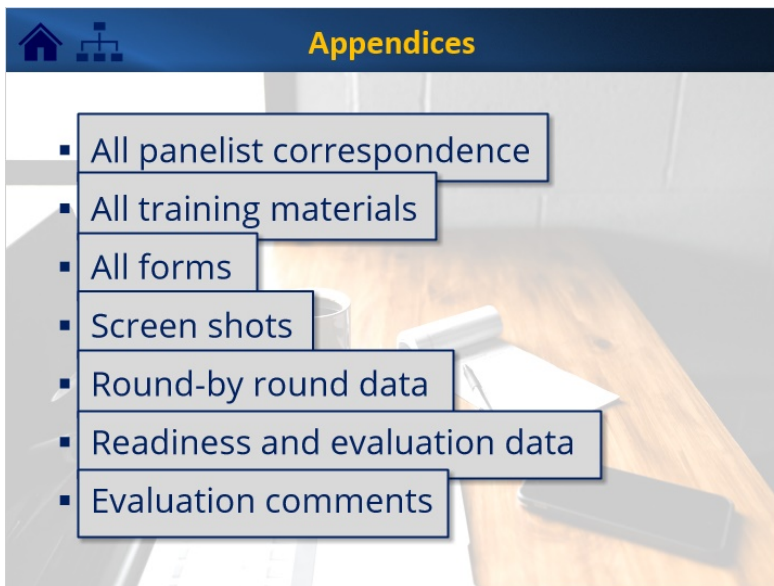
5.8 After: SS Recommendations



The slide features a dark blue header with a home icon and a tree diagram icon on the left, and the word "Recommendations" in yellow text on the right. The background is a blurred image of a desk with a laptop, a notebook, and a pen. A list of bullet points is overlaid on the left side of the slide.

- Adopt these cut scores
- Without modification
- Here's why:
 - ✓ Relate to PLDs
 - ✓ Show IQRs


5.9 After: SS Appendices




The slide features a dark blue header with a home icon and a tree diagram icon on the left, and the word "Appendices" in yellow text on the right. The background is a blurred image of a desk with a laptop, a notebook, and a pen. A list of bullet points is overlaid on the left side of the slide.

- All panelist correspondence
- All training materials
- All forms
- Screen shots
- Round-by round data
- Readiness and evaluation data
- Evaluation comments


5.10 After: SS Tips

Home  **Tips**

- Start with the Plan
- Create a shell
- Update verb tenses
- Update during standard setting
- Deliver *Executive Summary* first
- Collect information for appendices



5.11 After: SS Reviewers Report

Home  **Official Reviewer's Report**

- Summary of the Plan
- Observed vs. Expected
- The good, the bad, and the ugly
- Summary of procedural validity
- Recommendations

5.12 Bookend: SS After Final Report



5.13 Bookmark: Approve Cut Scores



5.14 After: SS The Usual Suspects

The Usual Suspects

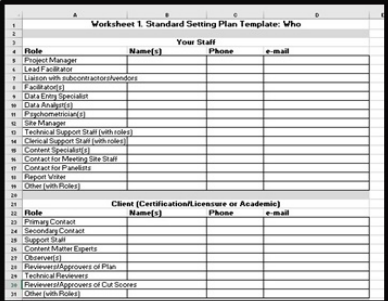
Please Open: *Worksheet 1/Who*

K-12 Setting	Certification & Licensure Setting
State or Local Board of Education	Board of Directors/Trustees
Superintendent/Commissioner	Executive Director
Assistant Superintendent/ Commissioner	Assistant Director
Assessment Director	Director of Testing/ Psychometrics
Assessment Department Staff	Psychometrician(s)
Technical Advisory Committee	External Reviewers
External Reviewers	

Worksheet

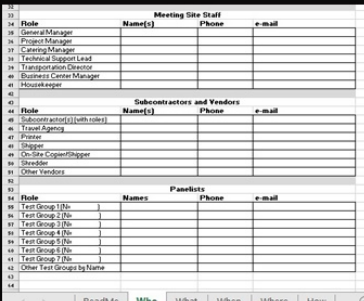
Worksheet (Slide Layer)

Worksheet: Who



Worksheet 1: Standard Setting Plan Template: Who

Role	Name(s)	Your Staff	Phone	e-mail
Project Manager				
Lead/End user				
Liaison with subcontractor/vendors				
Facilitator(s)				
Data Entry Operator				
Data Analyst(s)				
Psychometrician(s)				
Site Manager				
Technical Support Staff (with roles)				
Clerical Support Staff (with roles)				
Contract Specialist(s)				
Contract for Meeting Site Staff				
Contract for Travel/Hotels				
Report Writer				
Other (with Roles)				



Meeting Site Staff



Role	Name(s)	Phone	e-mail
General Manager			
Project Manager			
Contracting Manager			
Technical Support Lead			
Transportation Director			
Business Center Manager			
Housekeeper			

Subcontractors and Vendors


Role	Name(s)	Phone	e-mail
Subcontractor(s) (with roles)			
Travel Agency			
Printer			
Shopper			
On-Site Copy/Shipping			
Shredder			
Other Vendors			

Back

5.15 After: SS Whats the Plan



What's the Plan?

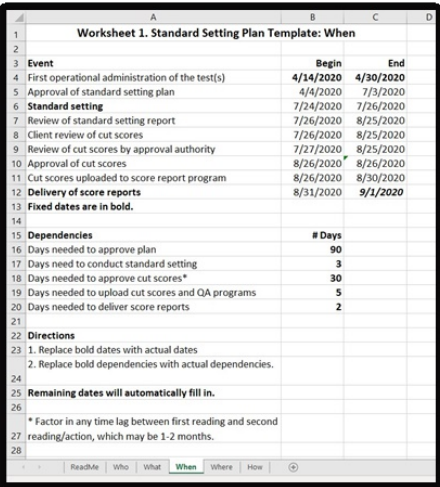
 **Please Open: Worksheet 1/When**

- What's the timeline?
- How many presentations will there be?
- Who presents what to whom?
- Be prepared!

Worksheet

Worksheet (Slide Layer)


Worksheet: When



Event	Begin	End
First operational administration of the test(s)	4/14/2020	4/30/2020
Approval of standard setting plan	4/14/2020	7/31/2020
Standard setting	7/24/2020	7/26/2020
Review of standard setting report	7/26/2020	8/25/2020
Client review of cut scores	7/26/2020	8/25/2020
Review of cut scores by approval authority	7/27/2020	8/25/2020
Approval of cut scores	8/26/2020	8/26/2020
Cut scores uploaded to score report program	8/26/2020	8/30/2020
Delivery of score reports	8/31/2020	9/1/2020
Fixed dates are in bold.		
Dependencies	# Days	
Days needed to approve plan	90	
Days need to conduct standard setting	3	
Days needed to approve cut scores*	30	
Days needed to upload cut scores and QA programs	5	
Days needed to deliver score reports	2	
Directions		
1. Replace bold dates with actual dates		
2. Replace bold dependencies with actual dependencies.		
Remaining dates will automatically fill in.		
* Factor in any time lag between first reading and second reading/action, which may be 1-2 months.		


Back

5.16 After: SS Stand Deliver





Stand and Deliver

- Prepare
- Rehearse
- Be concise
- Be positive
- Stay on script
- Answer questions
- Ask for approval
- Thank your audience




5.17 After: SS Get Approval

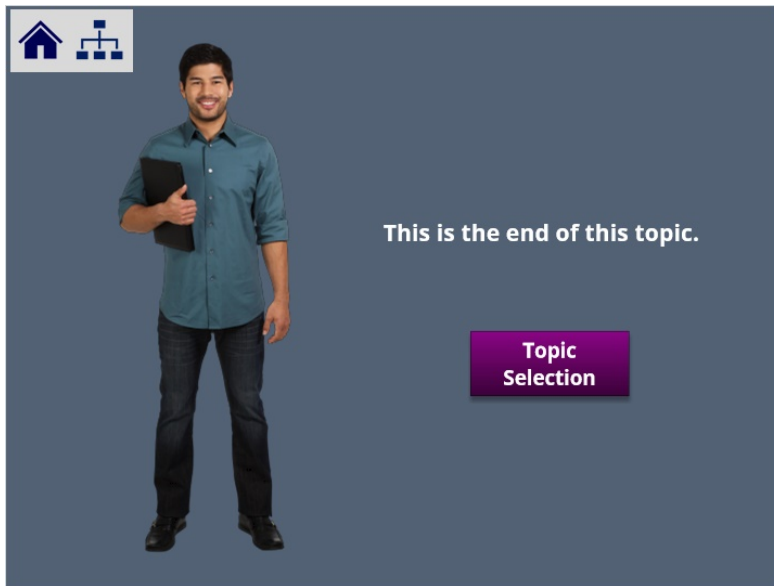


Get Approval

- It was a good plan - you approved it
- We followed it
- We obtained valid results
- The cut scores should be approved





5.18 Bookend: SS After Approve Cut Scores



5.19 Bookmark: Other Activities




5.20 After: SS Now What





Now What?


- Score scale
- Revise report
- Review/revise PLDs
- Upload cut scores
- Settle up
- Even more stuff




5.21 After: SS Score Scale



Score Scale

 **Please Open:**
Planning and Conducting Standard Setting: Appendix E Additional Files

- New test – new score scale
- Meaningful score at main cuts
- Meaningful range of scores
- Suggested methods



Worksheet (Slide Layer)

Worksheet: Scaling Methods

A screenshot of a spreadsheet titled "ReadMe" with the following content:

	A
1	ReadMe
2	
3	This workbook contains 4 spreadsheets, described below.
4	
5	1 Cut Raw - This spreadsheet shows how to convert a single cut score to a scale score with desired properties. It illustrates the necessity of trying more than once to satisfy all scale property criteria.
6	
7	2 Cuts Raw - This spreadsheet illustrates how to use the slope/intercept method with z scores.
8	
9	2 Cuts IRT - This spreadsheet shows how to use the slope/intercept method with theta values.
10	
11	Multi. Grade IRT - This spreadsheet shows how to use the slope/intercept method with two theta cuts, one from the lowest grade and one from the highest grade, it assumes a true vertical scale from the lowest to the highest grade.
12	
13	
14	

The spreadsheet interface shows tabs for "ReadMe", "1 Cut Raw", "2 Cuts Raw", "2 Cuts IRT", and "Multi. Grade IRT".

Back



5.22 After: SS Revise Report

A screenshot of a slide titled "Revise Report" with a list of key points:

- Changes during review process
- Comments on report draft
- High visibility – be prepared for multiple rounds
- Get it in writing
- Resolve conflicting revisions



If it is not in writing it did not happen!

5.23 After: SS Revise PLDs


  **Review/Revise PLDs**

- Review cut score changes
- Still match target PLDs?
- No chance to change cut scores now
- Change target PLDs only as absolutely necessary
- Create/revise reporting PLDs



5.24 After: SS Upload Cut Scores

  **Upload Cut Scores**

- Plan ahead
- Know where cut scores go
 - ✓ Don't forget new score scale
 - ✓ Don't forget reporting PLDs
- Check after uploading
- Run dummy reports
- Verify
- Get approval





5.25 After: SS Settle Up


  **Settle Up**

- Pay panelist stipends and expenses
- Thank panelists again
- Pay meeting site
- Thank meeting site management
- Report any problems to meeting site management
- Thank and congratulate staff

5.26 After: SS More Stuff

  **More Stuff**

- Post results
- Debrief
- Update methodology
- Write an article or paper?
- Exhale



5.27 Bookend: SS After Other Activities




 



A man in a teal shirt and dark pants is holding a black tablet. He is standing on a dark blue background.

This is the end of this topic.

Topic Selection

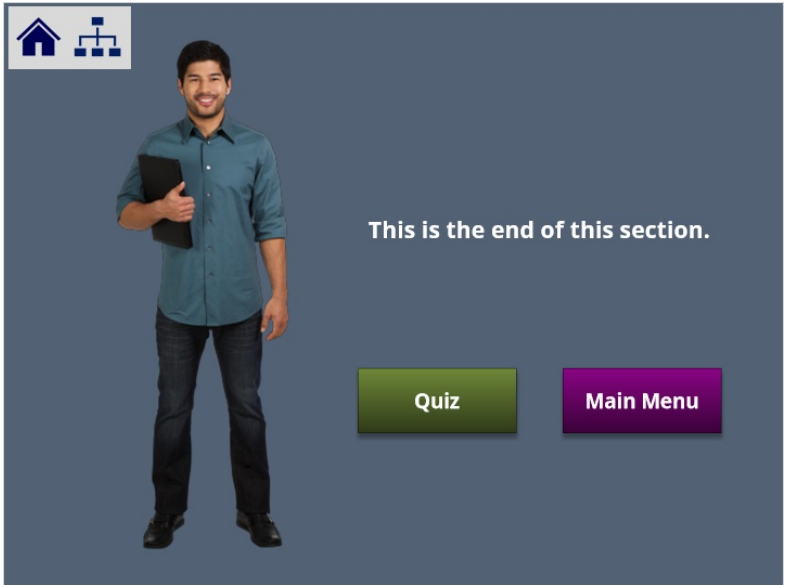
5.28 Fun Song



We close the module with a fun little ditty...

5.29 Bookend: Section 4 (SS After)



5.30 Module Cover (END)

