

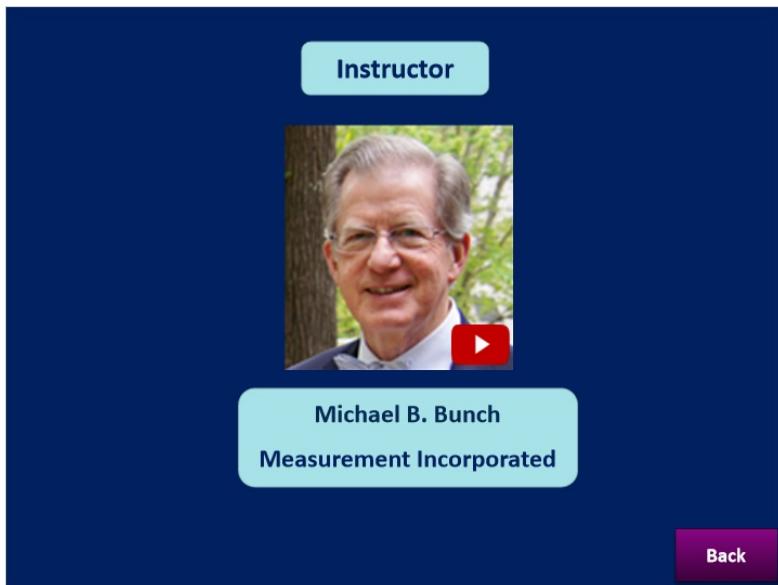
DM14 SLIDES (Standard Setting, Version 1.0)

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

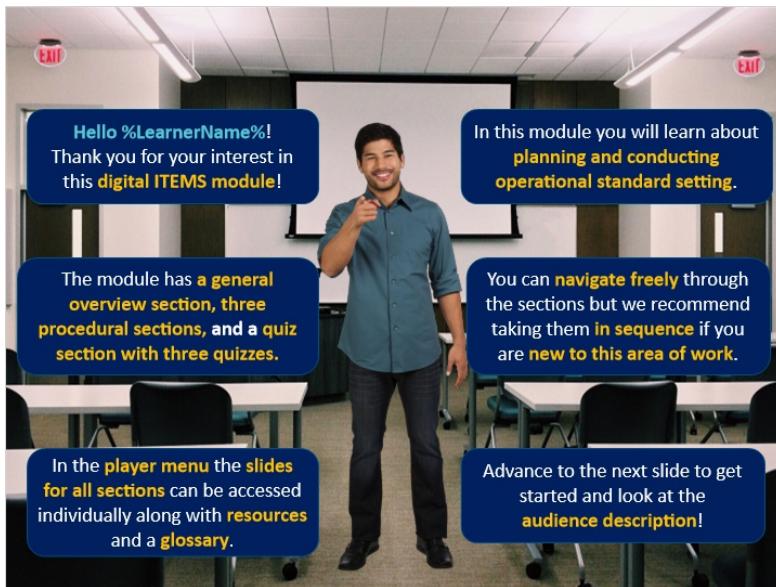
Welcome to the
ITEMS Module!

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



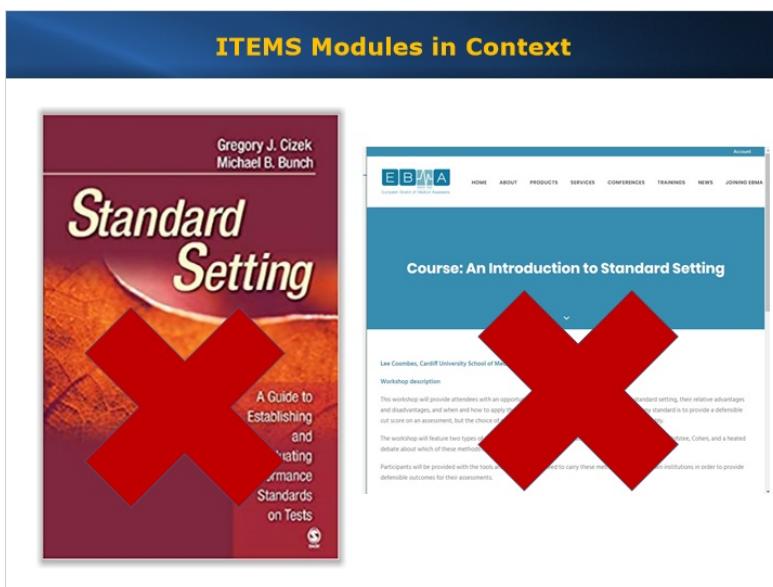
However, we hope that you find the information in this module useful no matter
what your official title or role in an organization is!

1.7 Expectations (I)



Let's discuss expectations....

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

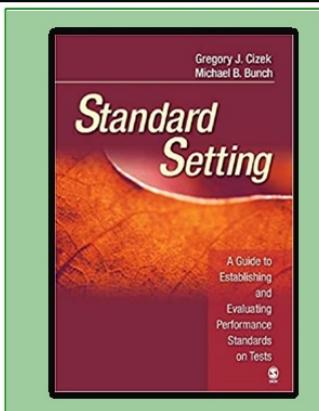
Bunch, M. B. (2020). Planning and conducting standard setting (Digital ITESTS Module 14). *Educational Measurement: Issues and Practice*, 39(2), XX-XX.



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**

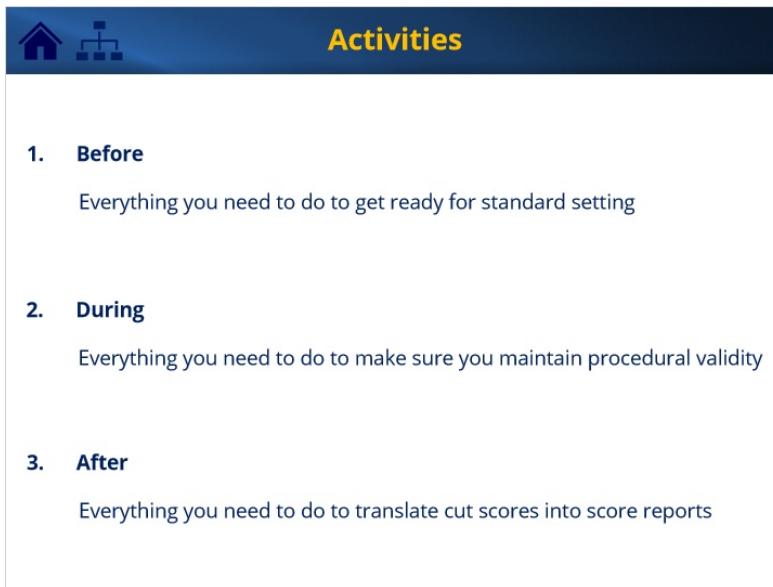
About 

- 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

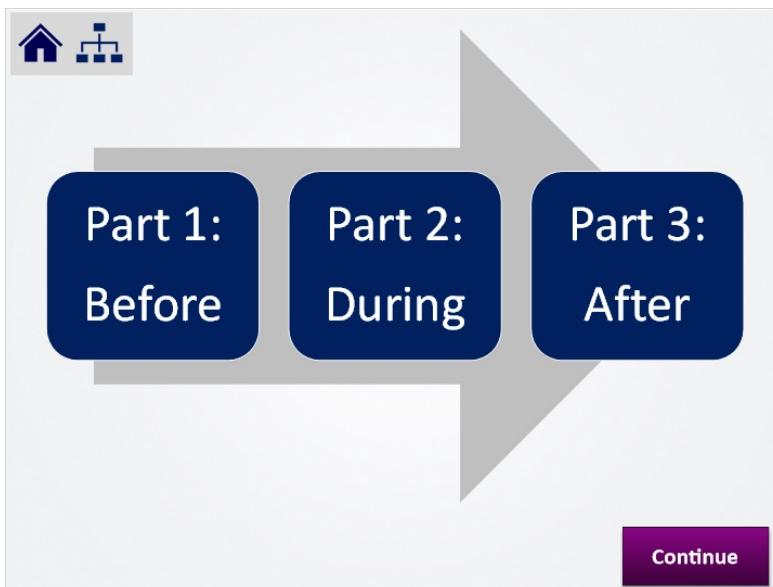
2.4 Overview: Activities



The screenshot shows a software interface with a dark blue header bar. On the left is a blue house icon with a tree icon to its right. To the right of the icons, the word "Activities" is written in a yellow, bold, sans-serif font. Below the header, the main content area is white. It contains a numbered list of three sections, each with a small blue icon to its left and a brief description in blue text to its right.

- 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



The screenshot shows a software interface with a light grey header bar. On the left is a blue house icon with a tree icon to its right. Below the header, the main content area is white. It features three blue rounded rectangular buttons arranged horizontally. A large grey arrow points from the left towards the buttons. Below the buttons, a purple "Continue" button is visible. The text on the buttons is white and bold.

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

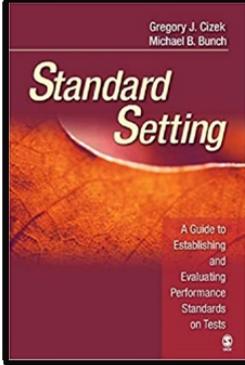
Resources

	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:

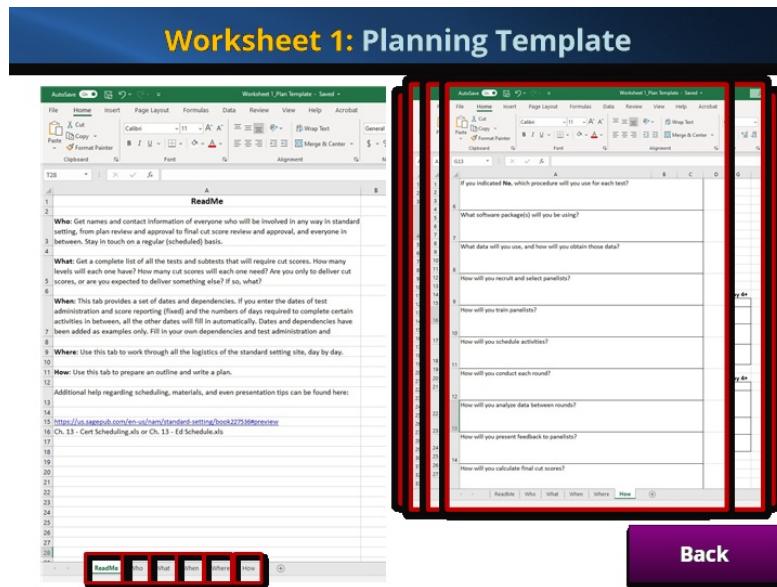
▪ 4 chapters
▪ Links to reports
▪ 5 appendices



Worksheet 1

Worksheet 1 (Slide Layer)

Worksheet 1: Planning Template



ReadMe

1. **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 (at least monthly) basis.

2. **What:** Get a completed list of all the tests and subtests that will require cut scores. How many levels of each are there? 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?

3. **When:** Tap into a set of times and boundaries. If necessary, the dates of test administration and score reporting (fixed) and the numbers 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 dependencies.

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

5. **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:

13. <https://us.sagepub.com/en-us/cam/standard-setting/book227536#review>

14. Ch. 13 - Cert Scheduling.xls or Ch. 13 - Ed Schedule.xls

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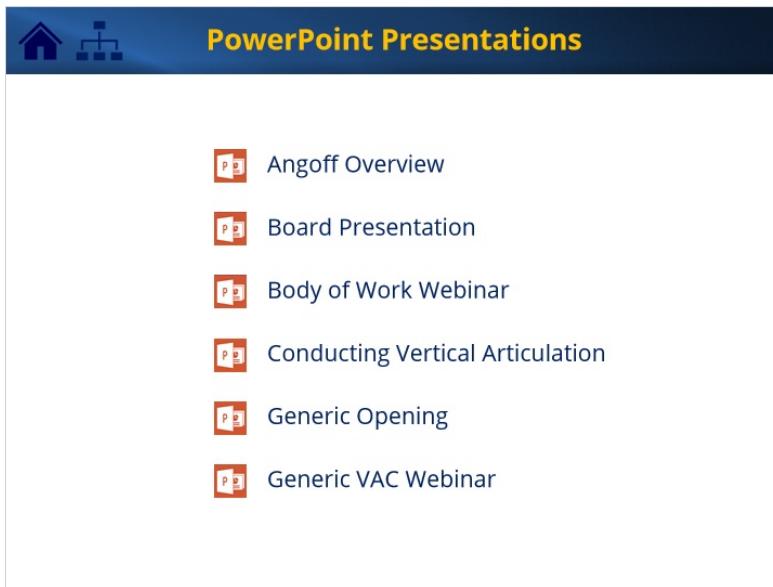
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2.12 Overview: SS PowerPoint



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

R2 Chart - This is the distribution of bookmarked page numbers by level for Round 2.

R2 Table - A tally of the Round 2 bookmarks (page numbers) for four cuts: Basic, Proficient, Accelerated, and Advanced. These are summarized to derive median pages, median theta values, and cuts. The first and third quartiles are also calculated to guide subsequent adjustments, should there be any. Staying within the interquartile range (IQR) is highly recommended when making adjustments to cut scores.

Impact - This tab shows in both tabular and graphic form the percentages of students classified in each performance level, based on the cut scores in R2 Table.

Impact Data for Round 2

Cut Score	% At or Above	% in Level
Below Basic	26	2%
Basic	6	31%
Proficient	26	58%
Accelerated	45	9%
Advanced	47	1%

Impact

Back

Buttons: Readfile, R2 Data, R2 Table, R2 Chart, Impact

2.14 Bookend: Section 1 (SS Overview)



3. Section 2: Before

3.1 Cover: Section 2



Section 2:
Before
[50 Minutes]

3.2 Before: SS Learning Objectives

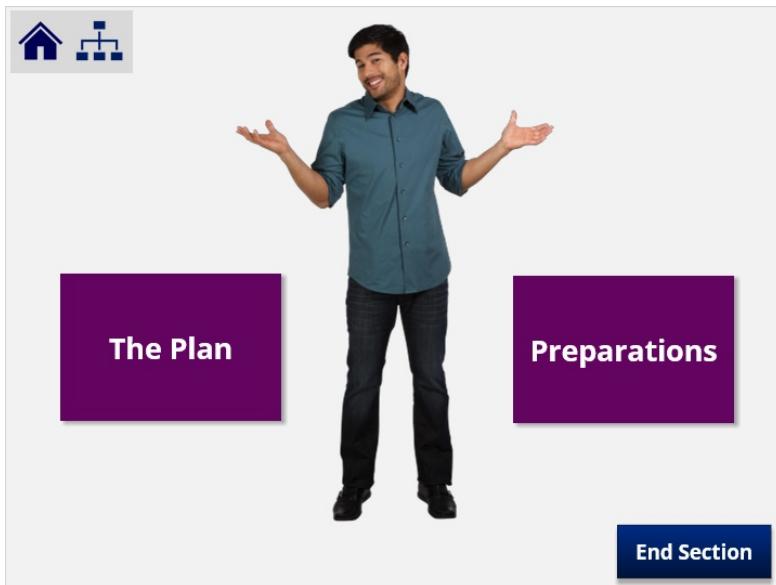


Learning Objectives



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

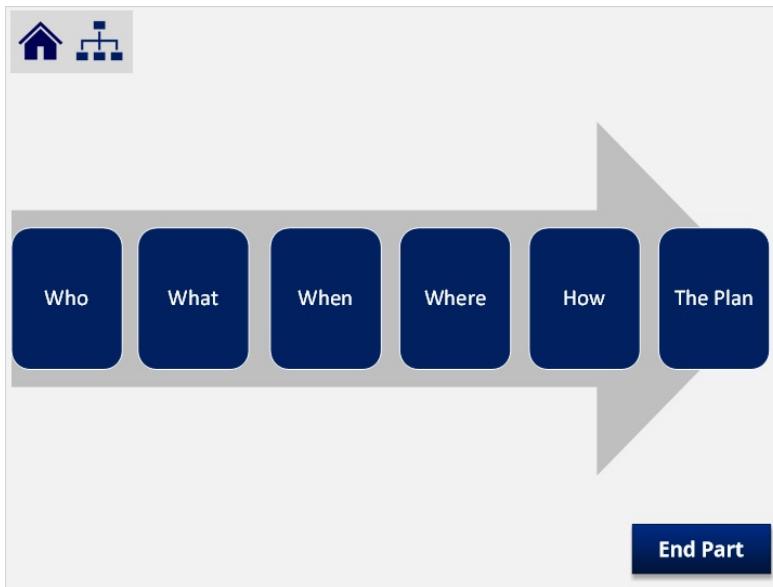
3.3 Topic Selection: SS Before



3.4 Bookmark: SS Before The Plan



3.5 Aspect Selection: SS Before Plan



3.6 Before: SS Plan Element Who

The screenshot shows a software interface for 'Plan Elements: Who'. At the top, there is a blue header bar with a house icon and a tree icon on the left, and the text 'Plan Elements: Who' in yellow on the right. Below the header is a red rectangular button with a white icon of a document with an 'X' and the text 'Please Open: Worksheet 1/Who' in red. A horizontal line separates this from the main content area. The main content area contains a list of five items in a dark blue list box, each preceded by a dark blue square bullet point:

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

Next to the list is a small image of a white and orange striped fabric or mesh material. At the bottom left is a dark blue button with the white text 'Back'. At the bottom right is a dark purple button with the white text 'Worksheet'.

Worksheet (Slide Layer)

Worksheet: Who

Worksheet 1. Standard Setting Plan Template: Who			
Role	Name(s)	Your Staff	
1	Project Manager		
2	Lead Facilitator		
3	Liaison with subcontractors/vendors		
4	Lead Data Analyst		
5	Data Entry Specialist		
6	Data Analyst(s)		
7	Site Manager		
8	Technical Support Staff (with roles)		
9	Administrative Staff (with roles)		
10	Content Specialist(s)		
11	Content Reviewer Staff		
12	Contract for Panels/		
13	Report Writer		
14	Other (with Roles)		
15	Client (Certification/Licensee or Academic)		
16	Role	Name(s)	
17	Primary Contact		
18	Secondary Contact		
19	Support Staff		
20	Content Matter Experts		
21	Reviewers/Agreeers of Plan		
22	Technical Reviewers		
23	Other (with Roles)		
24	Other (with Roles)		

Meeting Site Staff			
Role	Name(s)	Phone	e-mail
1	Project Manager		
2	Project Manager		
3	Catering Manager		
4	Transportation Lead		
5	Transportation Director		
6	Business Center Manager		
7	Housekeeper		
8	Other		
9	Subcontractors and Vendors		
10	Role	Name(s)	
11	Subcontractor(s) (with roles)		
12	Test Agency		
13	Printer		
14	Shipping/Carrier		
15	Other Copier/Shaper		
16	Shredder		
17	Other Vendors		
18	Panellists		
19	Role	Name	
20	Test Group 1 (N=		
21	Test Group 2 (N=		
22	Test Group 3 (N=		
23	Test Group 4 (N=		
24	Test Group 5 (N=		
25	Test Group 6 (N=		
26	Test Group 7 (N=		
27	Other Test Group by Name		
28	Other		

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				
4 List all tests for which cut scores will be set.	Number of subtests for which cut scores will be set	Compensatory or Conjunctive? (NA unless setting cut scores on subtests)		Vertical articulation needed?
		# of subtests	Conjunctive? (NA unless setting cut scores on subtests)	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19	What will you deliver?			
20				
21	Deliverable	Yes	No	
22	ALDs/PLDs			
23	Cut scores			
24	Standard setting final report			
25	Score reports			
26	Other (specify)			
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
4 First operational administration of the test(s)	4/14/2020	4/30/2020
5 Approval of standard setting plan	4/4/2020	7/3/2020
6 Standard setting	7/4/2020	7/26/2020
7 Review of standard setting report	7/26/2020	8/25/2020
8 Client review of cut scores	7/26/2020	8/25/2020
9 Review of cut scores by approval authority	7/27/2020	8/25/2020
10 Approval of cut scores	8/26/2020 [*]	8/26/2020
11 Cut scores uploaded to score report program	8/26/2020	8/30/2020
12 Delivery of score reports	8/31/2020	9/1/2020
13 Fixed dates are in bold.		
15 Dependencies	# Days	
16 Days needed to approve plan	90	
17 Days need to conduct standard setting	3	
18 Days needed to approve cut scores*	30	
19 Days needed to upload cut scores and QA programs	5	
20 Days needed to deliver score reports	2	

21. **Directions:**
23. 1. Replace bold dates with actual dates
2. Replace bold dependencies with actual dependencies.
24.
25. **Remaining dates will automatically fill in.**
26.
27. * Factor in any time lag between first reading and second reading/action, which may be 1-2 months.
28.

[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

Worksheet 1. Standard Setting Plan Template: Where					
3. Where will you conduct standard setting? (Check all that apply)	Day 1	Day 2	Day 3	Day 4	Day 4+
<input type="checkbox"/> Our offices					
<input type="checkbox"/> Client's offices					
<input type="checkbox"/> Conference center near us					
<input type="checkbox"/> Conference center near client					
<input type="checkbox"/> Hotel near us					
<input type="checkbox"/> Hotel near client					
<input type="checkbox"/> Hotel near the					
<input type="checkbox"/> Virtual (online/remote)					
<input type="checkbox"/> Other (Please specify)					
14. Large meeting rooms	Day 1	Day 2	Day 3	Day 4	Day 4+
15. How many large meeting rooms will you need each day?	[Please list rooms needed to be configured? (i.e.-Auditorium, Classroom)]				
16. M-Mic/Microphone; P-Projector; S-Screen; (TV=TV Monitor)					
17. What are the audiovisual needs each day? (i.e.-Internet, Small Group)					
18. How will those rooms need to be configured? (i.e.-Lecture, Small Group) (Provide layout if possible; see Breakout Room)					
19. Breakout rooms	Day 1	Day 2	Day 3	Day 4	Day 4+
20. How many breakout rooms will you need each day?	[Please list rooms needed to be configured? (i.e.-Lecture, Small Group)]				
21. What are the audiovisual needs each day? (i.e.-Internet, M-Mic/Microphone, P-Projector, S-Screen, (TV=TV Monitor))					
22. Detail below:					
23. How many people will each breakout room need to accommodate each day?					
24. What are the audiovisual needs each day? (i.e.-Internet, M-Mic/Microphone, P-Projector, S-Screen, (TV=TV Monitor))					
25. M-Mic/Microphone; P-Projector; S-Screen; (TV=TV Monitor)					

Worksheet 1. Standard Setting Plan Template: Where							
27. Sleeping rooms	Day 1	Day 2	Day 3	Day 4	Day 4+		
Will you be providing sleeping rooms for anyone?	<input type="checkbox"/> Yes (Go to the next set of questions)	<input type="checkbox"/> No	Day 0	Day 1	Day 2	Day 3	Day 4+
28. How many sleeping rooms will you need each day? (Day 0 is the night before the first day of standard setting.)							
29. How many accessible rooms will you need each day?							
30. Other	Day 1	Day 2	Day 3	Day 4	Day 4+		
31. Other	Day 1	Day 2	Day 3	Day 4	Day 4+		
32. Offices	Day 1	Day 2	Day 3	Day 4	Day 4+		
33. Conference room	Day 1	Day 2	Day 3	Day 4	Day 4+		
34. Equipment room	Day 1	Day 2	Day 3	Day 4	Day 4+		
35. Classroom	Day 1	Day 2	Day 3	Day 4	Day 4+		
36. Other (Please specify)	Day 1	Day 2	Day 3	Day 4	Day 4+		
37. Meals	Day 1	Day 2	Day 3	Day 4	Day 4+		
Will you be providing meals for anyone?	<input type="checkbox"/> Yes (Go to the next set of questions)	<input type="checkbox"/> No	Day 0	Day 1	Day 2	Day 3	Day 4+
38. How many meals will you need each day?							
39. How many lunches will you need each day?							
40. How many dinners will you need each day?							
41. How many special meals will you need each day? (Please list meals)							
42. Other support needs each day (Check each box that applies)	Day 0	Day 1	Day 2	Day 3	Day 4	Day 4+	
43. Day 0 is the day before standard setting begins.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
44. Transportation	Day 1	Day 2	Day 3	Day 4	Day 4+		
45. Information Technology	Day 1	Day 2	Day 3	Day 4	Day 4+		
46. Other (Please specify)	Day 1	Day 2	Day 3	Day 4	Day 4+		

Back

3.10 Before: SS Plan Element How

Plan Elements: How

X **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

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, etc.)

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

Planning and Conducting Standard Setting

Michael B. Bunch
April 17, 2020

 MEASUREMENT INCORPORATED

3.12 Before: SS Performance Level Descriptors

 **Performance Level Descriptors**

 **Please Open:**

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

Types

- Policy
- Range
- Target
- Reporting

Development

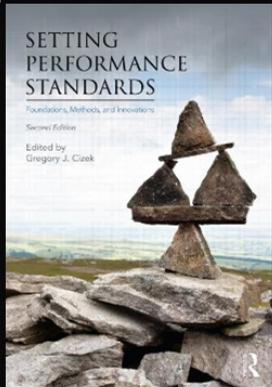
- Drafting
- Review
- Approval

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

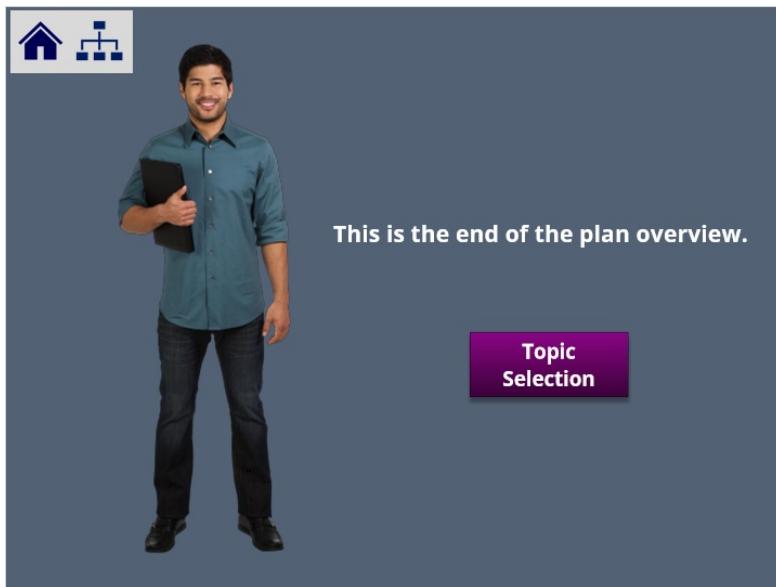
Standard Setting Contingency Planning
Things That Go Bump in the Night (and Day)

Standard setting, 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 10-30%.
Panelists arrive late.	Procedural validity may be called into question.	Depend on late arrivals to 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 the sidebar.
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 and will raise other 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. If the problem persists, the facilitator should escalate the matter to the lead facilitator who will counsel.

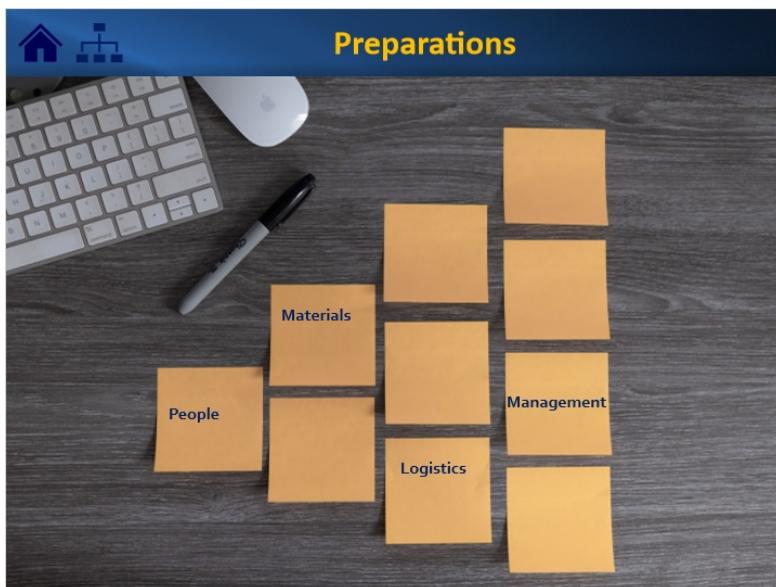
Back

3.16 Bookend: SS Before The Plan

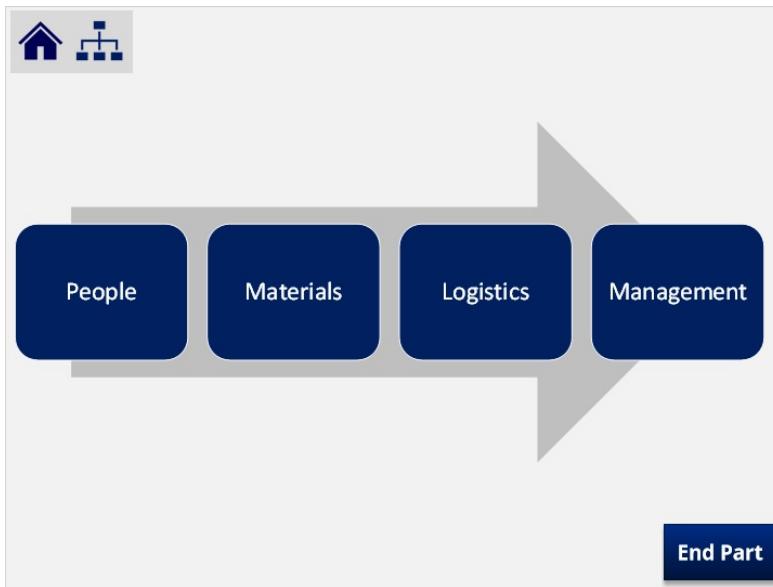


This is the end of the plan overview.

3.17 Bookmark: SS Before Preparations



3.18 Aspect Selection: SS Before Prepartions



3.19 Before: SS People

People

Please Open:

→ Planning and Conducting Standard Setting, pp. 26-41
→ Appendices A and D

Panelists	<ul style="list-style-type: none">How many? What assortment? How to recruit?
Your staff	<ul style="list-style-type: none">Project manager, lead facilitator, facilitators, data entry staff, support staff
Site staff	<ul style="list-style-type: none">Hotel manager, banquet manager
Sponsoring agency staff	<ul style="list-style-type: none">Main contact, support staff
Others	<ul style="list-style-type: none">Vendors, subcontractors

Back

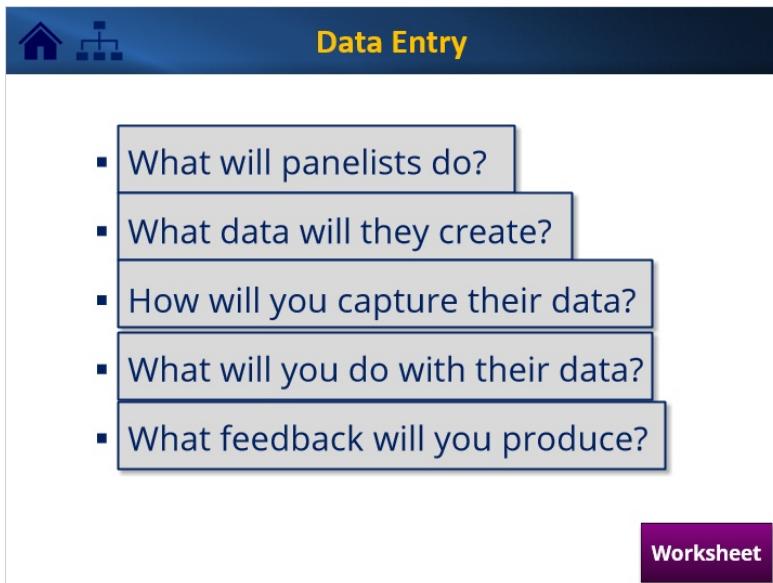
3.20 Before: SS Logistics



3.21 Before: SS Materials Equipment



3.22 Before: SS Data Entry 1

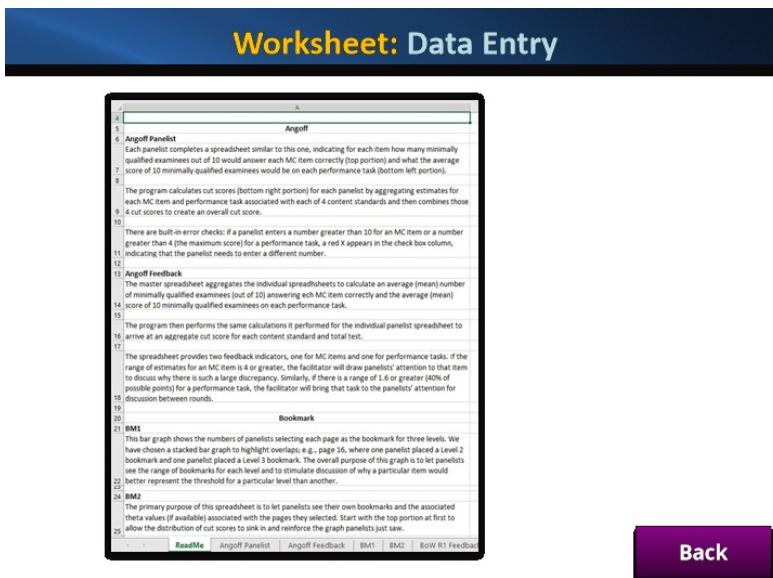


The slide has a dark blue header with a house icon and the text "Data Entry". A sidebar on the left contains five questions in a list:

- 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?

A purple "Worksheet" button is located at the bottom right of the slide area.

Worksheet (Slide Layer)



The slide has a dark blue header with the text "Worksheet: Data Entry". The main content is a screenshot of a spreadsheet titled "Angoff Panelist". The spreadsheet contains the following text:

Angoff Panelist
Each panelist completes a spreadsheet similar to this one, indicating for each item how many minimally qualified examinees out of 10 would answer each MC item correctly (top portion) and what the average (mean) score of 10 minimally qualified examinees would be on each performance task (bottom left portion).

The program calculates cut scores (right portion) for each panelist by aggregating estimates for each MC item and performance task associated with each of 4 content standards and then combines those 4 cut scores to create an overall cut score.

There are built-in error checks: if a panelist enters a number greater than 10 for an MC item or a number greater than 4 (the maximum score) for a performance task, a red X appears in the check box column, indicating that the panelist needs to enter a different number.

Angoff Feedback
The master spreadsheet aggregates the individual spreadsheets to calculate an average (mean) number of minimally qualified examinees (out of 10) answering each MC item correctly and the average (mean) score of 10 minimally qualified examinees on each performance task.

The program then performs the same calculations it performed for the individual panelist spreadsheet to arrive at an aggregate cut score for each content standard and total test.

The spreadsheet provides two feedback indicators, one for MC items and one for performance tasks: if the range of estimates for an MC item is 4 or greater, the facilitator will draw panelists' attention to that item to discuss why there is such a large discrepancy. Similarly, if there is a range of 1.6 or greater (40% of possible points) for a performance task, the facilitator will bring that task to the panelists' attention for discussion between rounds.

Bookmark
This bar graph shows the numbers of panelists selecting each page as the bookmark for three levels. We have chosen a stacked bar graph to highlight overlaps, e.g., page 15, where one panelist placed a Level 2 bookmark and another panelist placed a Level 3 bookmark. The overall purpose of this graph is to let panelists use this as a bookmark for review and discussion of why a particular item would better represent the threshold for a particular level than another.

BM1
The primary purpose of this spreadsheet is to let panelists see their own bookmarks and the associated values (if available) associated with the pages they selected. Start with the top portion at first to allow the distribution of cut scores to sink in and reinforce the graph panelists just saw.

BM2

ReadMe | Angoff Panelist | Angoff Feedback | BM1 | BM2 | BoW R1 Feedback

A purple "Back" button is located at the bottom right of the slide area.

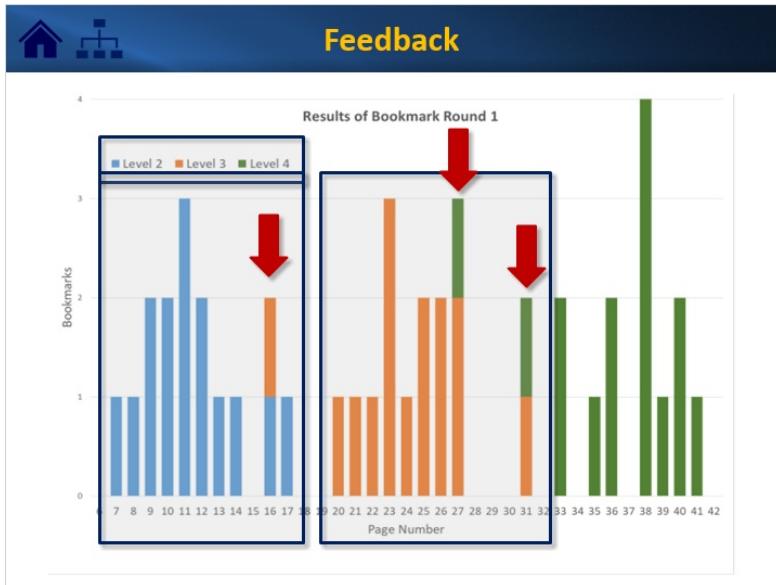
3.23 Before: SS Data Entry 2

Data Entry (cont.)

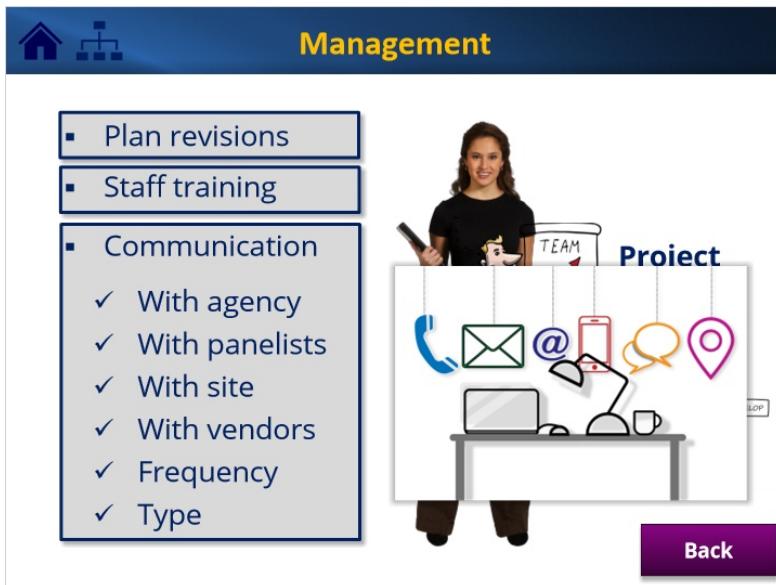
Please Open: Worksheet 4 Data Entry

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

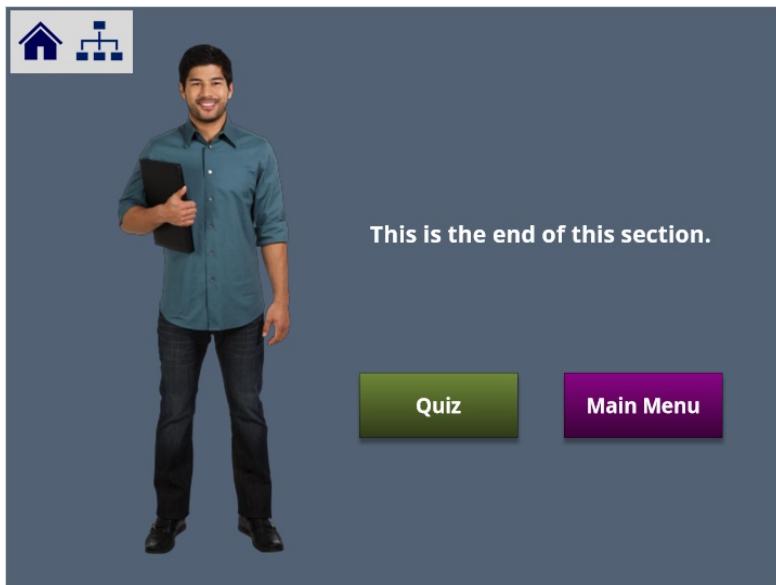


3.25 Before: SS Management



The screenshot shows a software interface titled "Management". On the left, a sidebar lists tasks: "Plan revisions", "Staff training", and "Communication" (with sub-points: "With agency", "With panelists", "With site", "With vendors", "Frequency", and "Type"). To the right is a central area featuring a woman standing behind a desk. On the desk are icons representing communication channels: a telephone, an envelope, an '@' symbol, a smartphone, a speech bubble, and a location pin. Above the desk, the word "TEAM" is written above a "Project" box. A "Back" button is located at the bottom right of the central area.

3.26 Bookend: Section 2 (SS Before)



The screenshot shows a software interface with a man in a teal shirt and dark pants holding a tablet. The text "This is the end of this section." is displayed. At the bottom are two buttons: a green "Quiz" button and a purple "Main Menu" button.

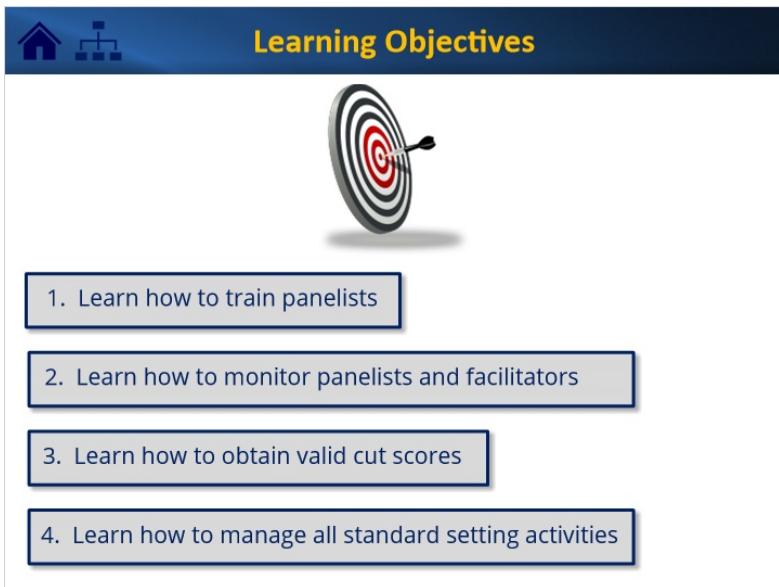
4. Section 3: During

4.1 Cover: Section 3



Section 3:
During
[60 Minutes]

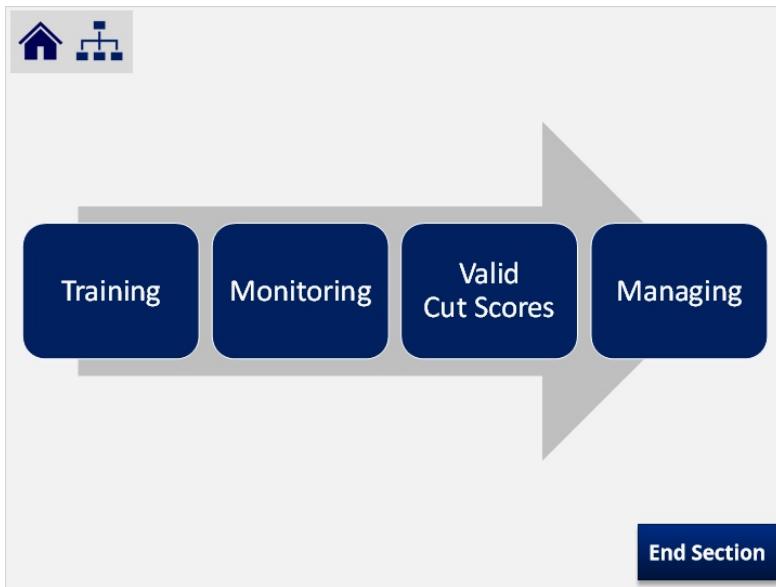
4.2 During: SS Learning Objectives



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

  **Opening Session: Preparation**

- 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

  **Opening Session: Content**

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

Test Details

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 screenshot of a slide titled "Training Activities". The slide has a blue header with a house icon and the title. Below the title, there is a red icon of a book and the text "Please Open: Planning and Conducting Standard Setting, Appendix B". A horizontal line separates this from a list of four questions, each in a blue box with a black border. The questions are:

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

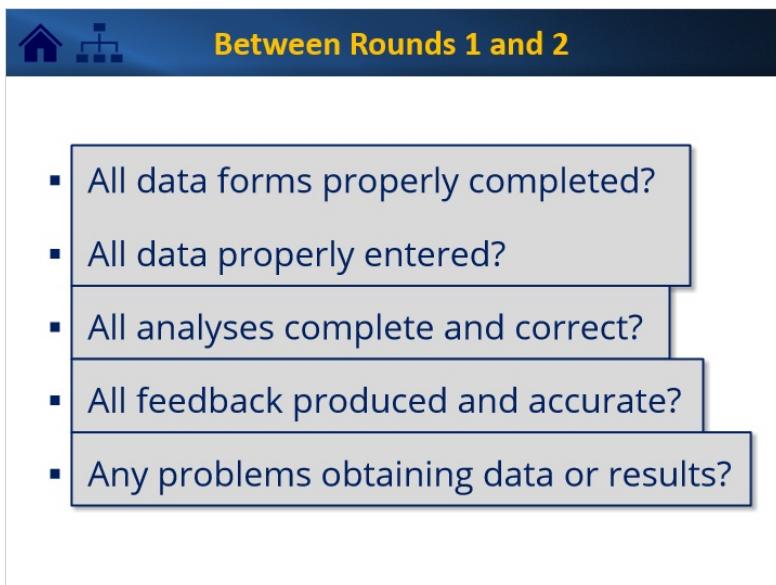
4.16 During: SS Round 1



The screenshot shows a software interface with a dark blue header. On the left is a blue house icon with a tree. To its right, the word "Round 1" is written in yellow. Below the header is a list of questions in a white box with a thin blue border. The questions are:

- 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



The screenshot shows a software interface with a dark blue header. On the left is a blue house icon with a tree. To its right, the text "Between Rounds 1 and 2" is written in yellow. Below the header is a list of questions in a white box with a thin blue border. The questions are:

- 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

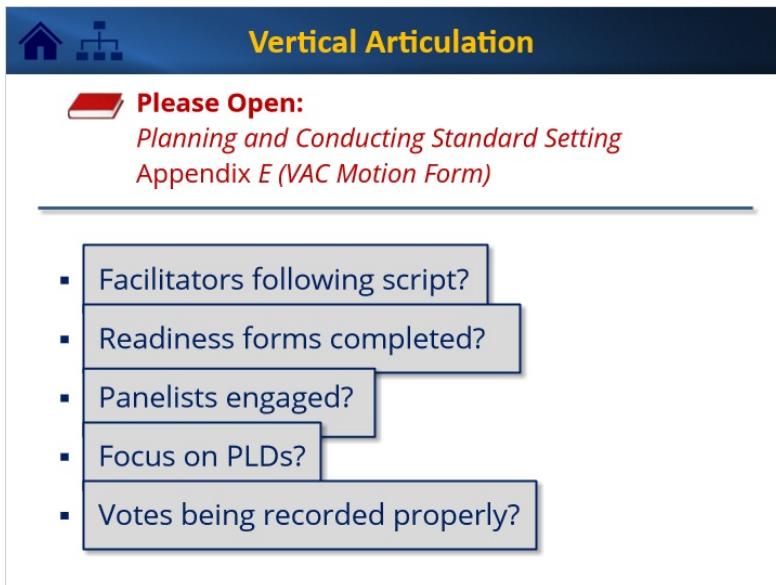
4.21 During: SS Btwn R3 Vertical Articulation



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

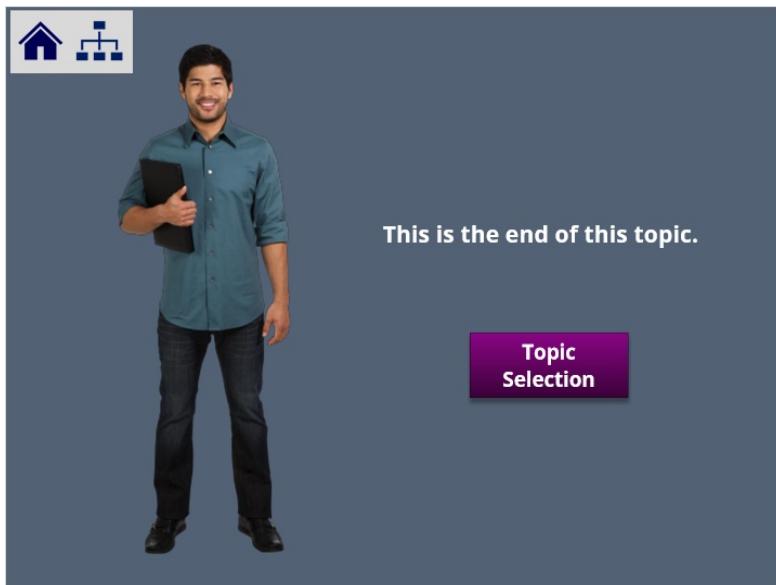


Vertical Articulation

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?

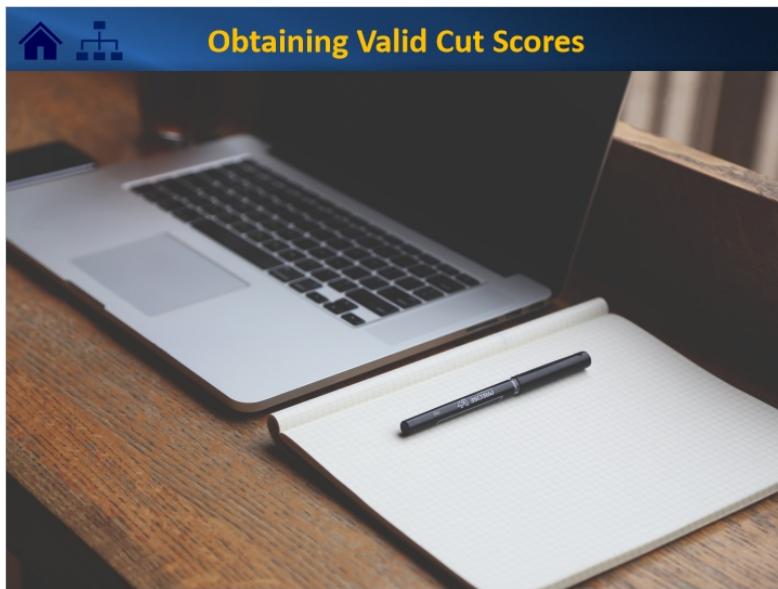
4.23 Bookend: SS During Monitoring



This is the end of this topic.

Topic Selection

4.24 Bookmark: Valid Cut Scores



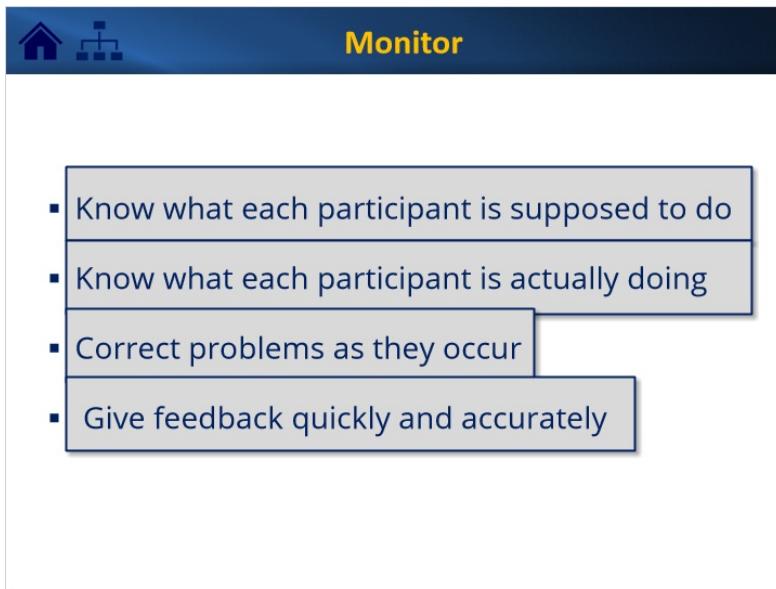
4.25 During: SS Follow Script

A screenshot of a slide titled "Follow the Script". The slide includes a "Please Open" note and a list of four steps. The steps are: "Train facilitators thoroughly", "Conduct dry runs or field tests", "Go over next day's events after debriefing", and "Stay on schedule".

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

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

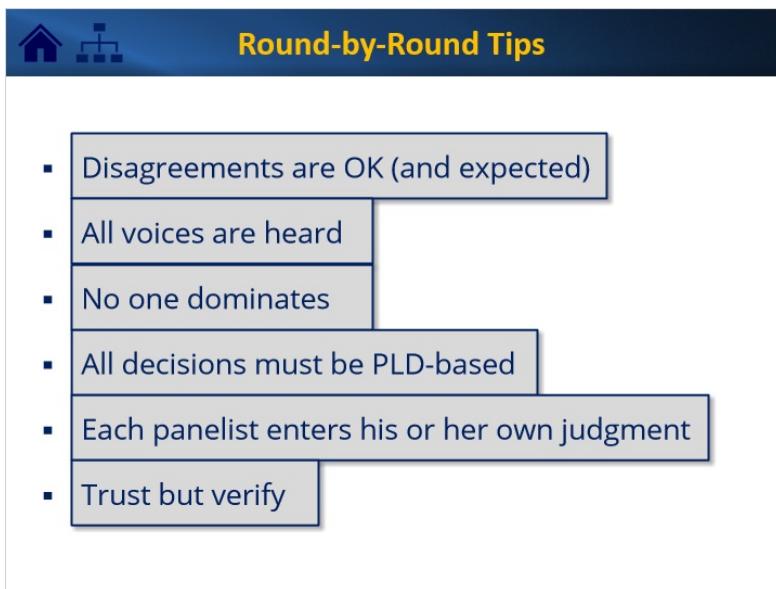
4.26 During: SS Monitor



The screenshot shows a software window titled "Monitor". In the top left corner, there is a house icon with a tree-like structure. The title "Monitor" is centered in the top bar. Below the title, there is a list of four items, each preceded by a blue square bullet point:

- 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



The screenshot shows a software window titled "Round-by-Round Tips". In the top left corner, there is a house icon with a tree-like structure. The title "Round-by-Round Tips" is centered in the top bar. Below the title, there is a list of seven items, each preceded by a blue square bullet point:

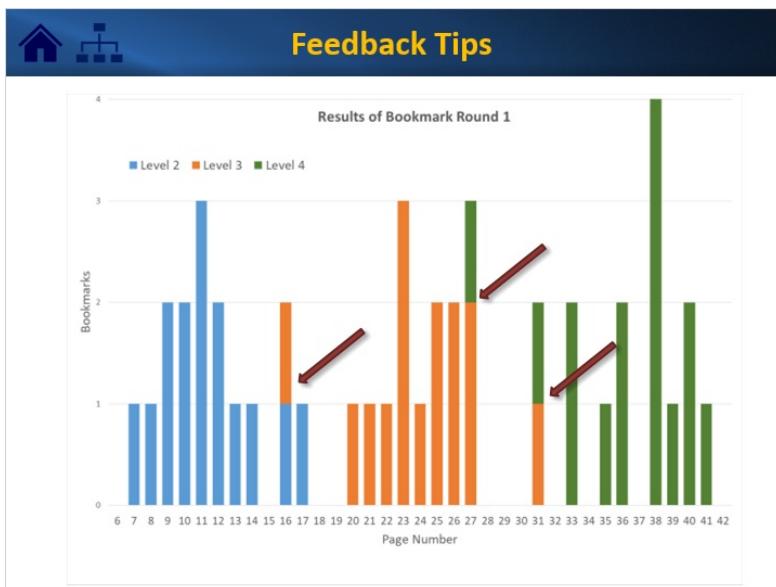
- Disagreements are OK (and expected)
- All voices are heard
- No one dominates
- All decisions must be PLD-based
- Each panelist enters his or her own judgment
- Trust but verify

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**

% At or Above Cut Score

Grade	Level 2	Level 3	Level 4
3	72	42	10
4	72	35	5
5	78	40	2
6	55	22	1
7	75	42	2
8	78	35	1

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 IRT 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 theta for each item. For a Body of Work procedure, this would be the theta for each group level in the Theta tab. The Theta tab has two values: theta and N 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 cut in the first section. It is based on a set of lookup tables associating the theta cuts in the first section with the appropriate data set in the Theta tab. The percentages of students at each level, based on the theta cuts in the first section.

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

The graph shows the percentage of students at or above the theta cut for each level.

For a page number in the first section, and change it for example, change the Round 3 button for Grade 4 Level 3 from 52 to 43, 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 straighten out between grades 4 and 6.

Change any other page number in the first section of the table, and you will notice changes in 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 panelists and identify data points on the graph that seem reasonable. If they do not seem reasonable, change the page numbers in the first section.

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 cut scores that make sense. If you are not sure that the moderation makes sense, do not change the cut scores. 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.

Back

4.31 During: SS Vertical Articulation Tips 2

Vertical Articulation Tips (cont.)

The diagram illustrates a vertical articulation setup. On the left, a 'Facilitator' is positioned next to a 'Projector' and a 'Laptop'. A vertical line labeled 'Screen' extends upwards from the facilitator. To the right, six tables are arranged in two rows of three. The top row contains 'Table 1' (3, 5, 7, HS), 'Table 3' (4, 6, 8, HS), and 'Table 6' (3, 5, 7, HS). The bottom row contains 'Table 2' (4, 6, 8, HS), 'Table 4' (3, 5, 7, HS), and 'Table 5' (4, 6, 8, HS). Each table is surrounded by a cluster of grey circles.

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

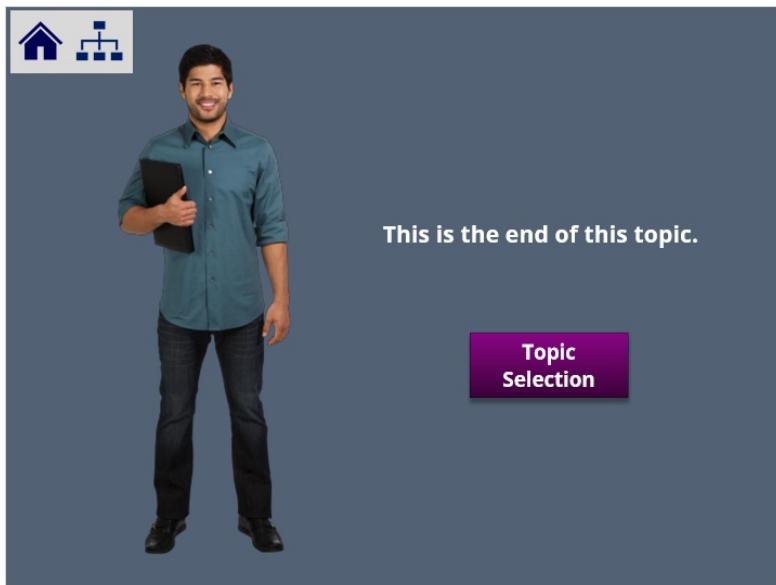
4.33 During: SS Work With One Another



The slide has a dark blue header bar with a house icon and the text "Work With One Another" in yellow. Below the header is a list of bullet points in a white box. At the bottom is a colorful graphic of four stylized human heads in orange, yellow, green, and blue, with the word "TEAMWORK" in a matching color scheme.

- 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



The slide features a dark blue background. On the left, a man in a teal shirt and dark pants holds a black tablet. In the center, the text "This is the end of this topic." is displayed. On the right, a purple button with the text "Topic Selection" is visible. The top left corner contains a house icon.

4.35 Bookmark: Managing



4.36 During: SS Division Responsibilities

A screenshot of a slide titled "Division of Responsibilities". The slide lists four roles in a bulleted list: "Project Manager/On-Site Coordinator", "Lead Facilitator", "Sponsoring Agency Lead", and "Official Reviewer". To the right of the list is a circular icon depicting a globe with silhouettes of people standing on it, representing global reach or international collaboration.

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
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, try to provide a make-up training session. If they are 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 <i>N</i> , for every group, that is representative.
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 move the panelists. 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 delete all data from that panelist.
Panelists dominate.	One panelist who occupies a table or room can artificially cut short or cut out 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. 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

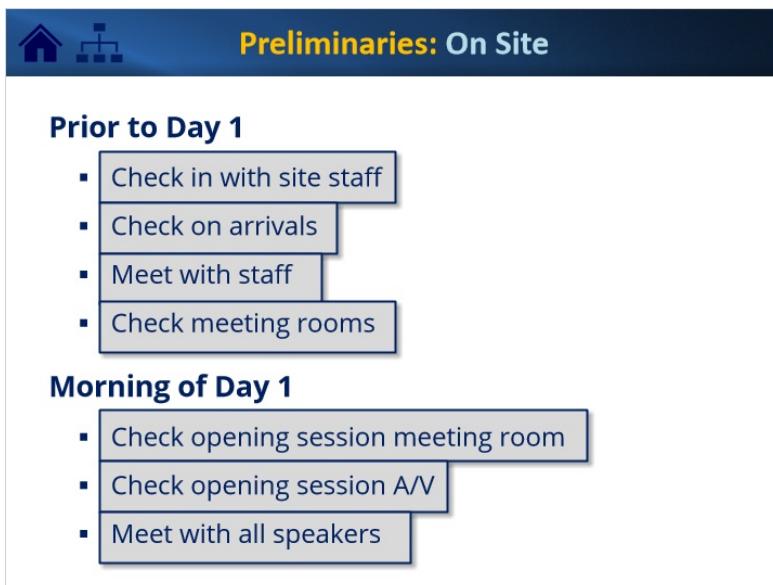


- Monitoring project manager and lead facilitator
- Monitoring breakout sessions
- Documenting observations
- Giving timely feedback

If you **see** something, **say** something

- Participating in daily debriefing

4.41 During: SS Prelim OnSite



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

  **Wrap-Up**

- Thanking panelists
- Closing down
- Reporting



4.45 Bookend: SS During Managing

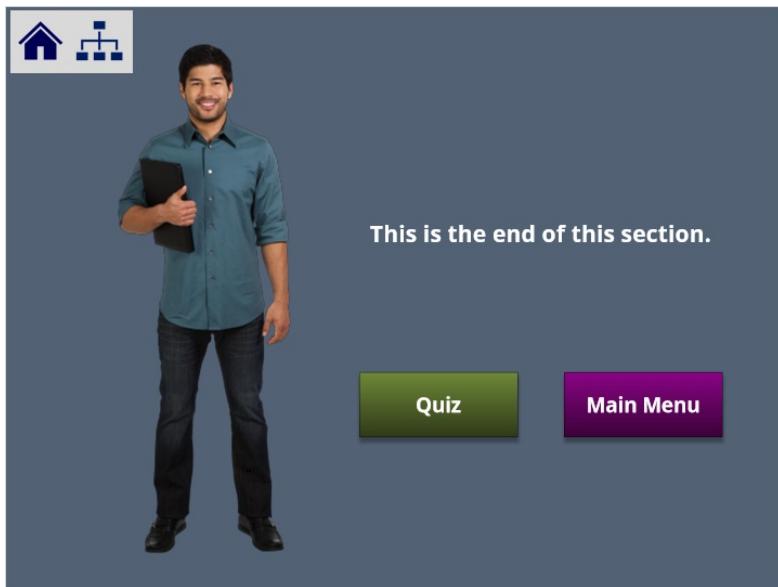
 



This is the end of this topic.

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 has a blue header bar with a house icon and the text "Learning Objectives". Below the header is a target icon with an arrow hitting the bullseye. The main content area contains three numbered boxes: 1. Write a final report, 2. Get cut scores approved, and 3. Complete additional activities.

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

5.3 Topic Selection: SS After



The slide has a blue header bar with a house icon. Below the header are three green-outlined boxes: "Final Report", "Approve Cut Scores", and "Other Activities". At the bottom right is a blue "End Section" button.

Final Report

Approve Cut Scores

Other Activities

End Section

5.4 Bookmark: Final Report



5.5 After: SS Final Report Outline

A screenshot of a web page titled 'Final Report Outline'. The page includes a table of contents and a preview of a document titled 'Planning and Conducting Standard Setting'.

Please Open:

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

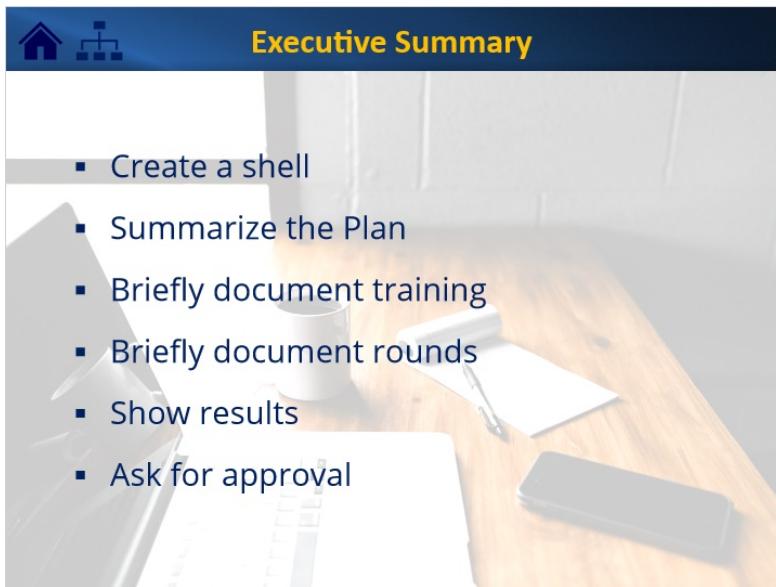
- Title Page
- Table of Contents
- Executive Summary
- Introduction
- Methodology
- Round-by-Round Summary
- Results
 - ✓ Cut scores
 - ✓ Impact
- Recommendations
- References
- Appendices

Planning and Conducting Standard Setting

Michael B. Bunch
April 17, 2020

MI MEASUREMENT INCORPORATED

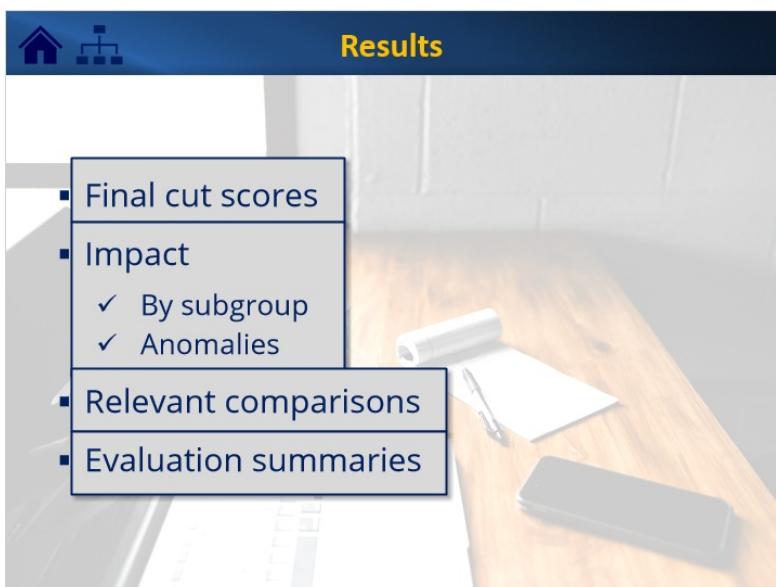
5.6 After: SS Executive Summary



Executive Summary

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

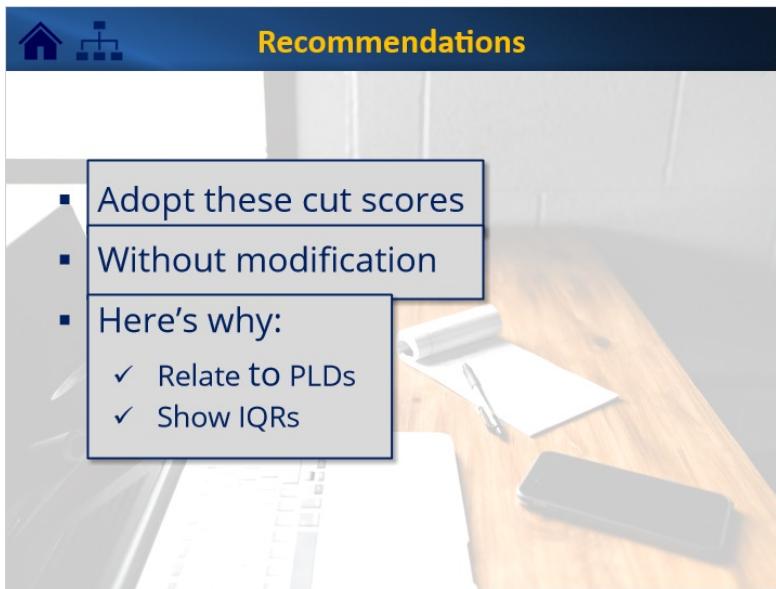
5.7 After: SS Results



Results

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

5.8 After: SS Recommendations

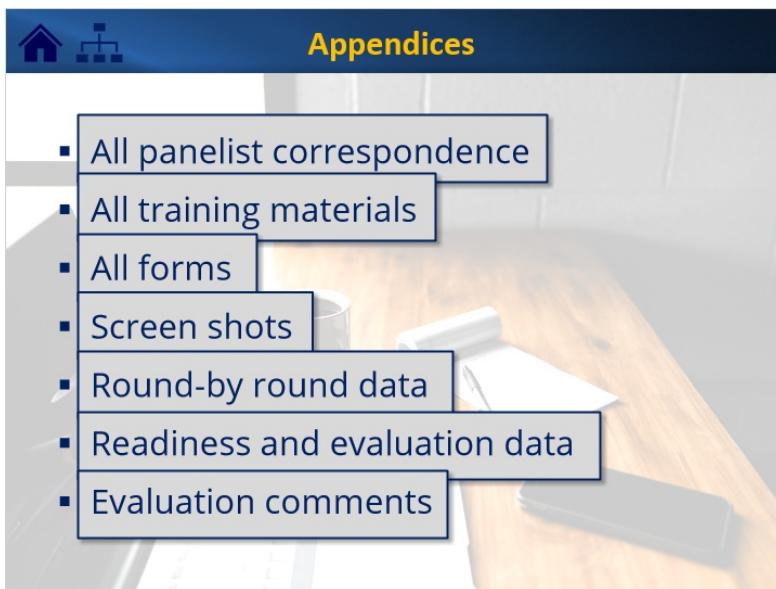


The screenshot shows a software interface with a dark blue header. On the left is a navigation icon consisting of a house and a tree. The header contains the word "Recommendations" in yellow. Below the header is a list of items in a white box with a thin blue border. The items are:

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

The background of the interface shows a blurred image of a desk with a keyboard, a pen, and a smartphone.

5.9 After: SS Appendices

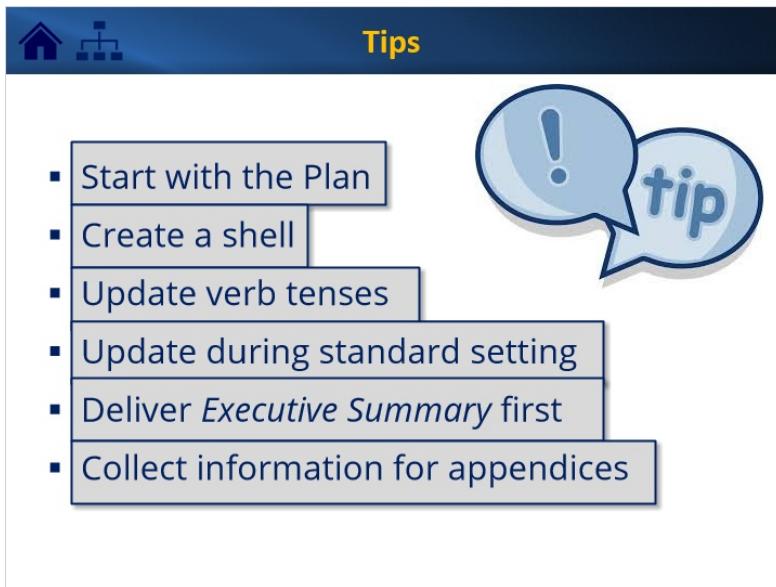


The screenshot shows a software interface with a dark blue header. On the left is a navigation icon consisting of a house and a tree. The header contains the word "Appendices" in yellow. Below the header is a list of items in a white box with a thin blue border. The items are:

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

The background of the interface shows a blurred image of a desk with a keyboard, a pen, and a smartphone.

5.10 After: SS Tips



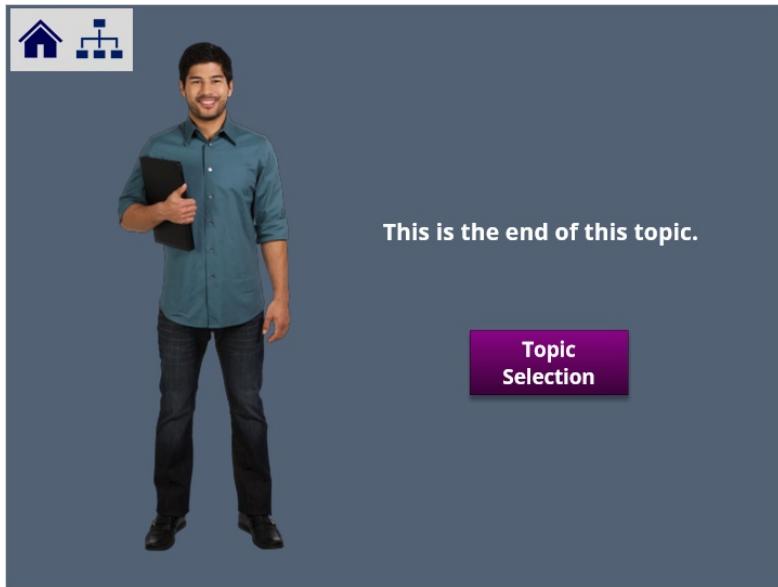
■ Start with the Plan
■ Create a shell
■ Update verb tenses
■ Update during standard setting
■ Deliver *Executive Summary* first
■ Collect information for appendices

5.11 After: SS Reviewers Report



■ 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 Facilitator				
Liaison with subcontractors/vendors				
Assessment Director				
Data Analyst(s)				
Design Specialist(s)				
Site Manager				
Technical Support Staff (with roles)				
Content Specialist(s) (with roles)				
Meeting Site Staff				
Contact for Panelists				
Region Writer				
Other (with Roles)				
Client (Certification/Licensure or Academic)				
Role	Name(s)	Phone	e-mail	
Primary Contact				
Secondary Contact				
Subject Matter Experts				
Reviewers/Approvers of Plan				
Technical Reviewers				
Test Scoring Committees or Cut Scores				
Other (with Roles)				

Worksheet 1. Standard Setting Plan Template: Who				
Role	Name(s)	Meeting Site Staff	Phone	e-mail
Meeting Site Manager				
Project Manager				
Program Manager				
Catering Manager				
Transportation Lead				
Transportation Director				
Business Center Manager				
Housekeeper				
Sub-contractors and Vendors				
Role	Name(s)	Phone	e-mail	
Sub-contractors (with roles)				
Food Service				
Printers				
Shippers				
Other Copier/Shippers				
Dividers				
Other Vendors				
Panelists				
Role	Name(s)	Phone	e-mail	
Test Group 1 (6)				
Test Group 2 (6)				
Test Group 3 (6)				
Test Group 4 (6)				
Test Group 5 (6)				
Test Group 6 (6)				
Test Group 7 (6)				
Other Test Group (6)				

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

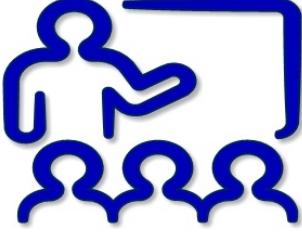
Event	Begin	End
4 First operational administration of the test(s)	4/14/2020	4/30/2020
5 Approval of standard setting plan	4/4/2020	7/3/2020
6 Standard setting	7/24/2020	7/26/2020
7 Review of standard setting report	7/26/2020	8/25/2020
8 Client review of cut scores	7/26/2020	8/25/2020
9 Review of cut scores by approval authority	7/27/2020	8/25/2020
10 Approval of cut scores	8/26/2020 [*]	8/26/2020
11 Cut scores uploaded to score report program	8/26/2020	8/30/2020
12 Delivery of score reports	8/31/2020	9/1/2020
13 Fixed dates are in bold.		
15 Dependencies	# Days	
16 Days needed to approve plan	90	
17 Days need to conduct standard setting	3	
18 Days needed to approve cut scores*	30	
19 Days needed to upload cut scores and QA programs	5	
20 Days needed to deliver score reports	2	
22 Directions		
23 1. Replace bold dates with actual dates		
24 2. Replace bold dependencies with actual dependencies.		
25 Remaining dates will automatically fill in.		
26 * 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



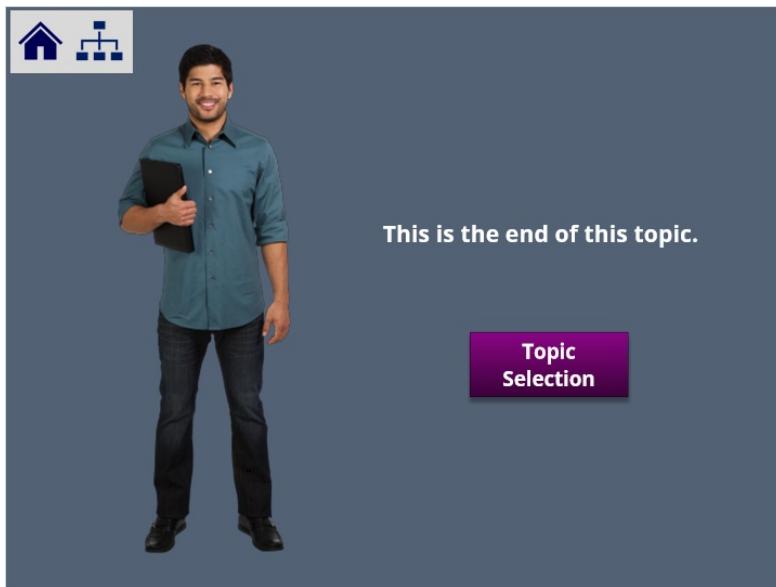
5.17 After: SS Get Approval

  **Get Approval**

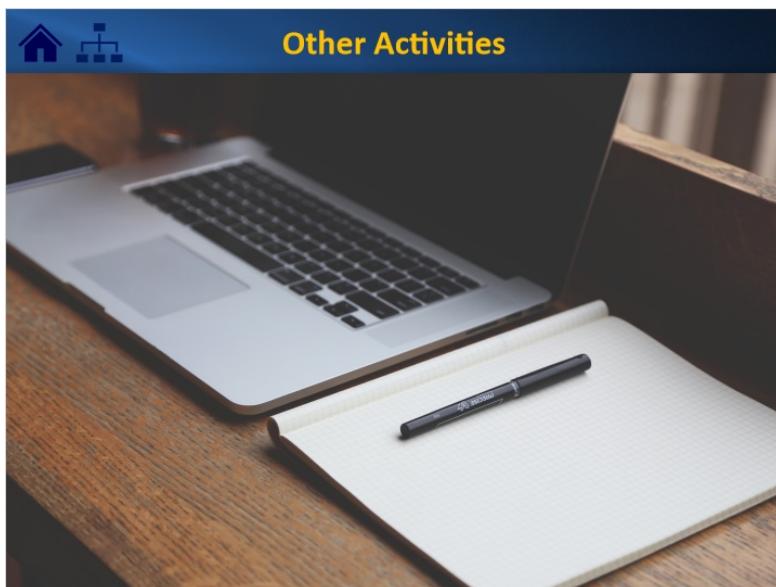
- It was a good plan - you approved it
- We followed it
- We obtained valid results
- The cut scores should be approved



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

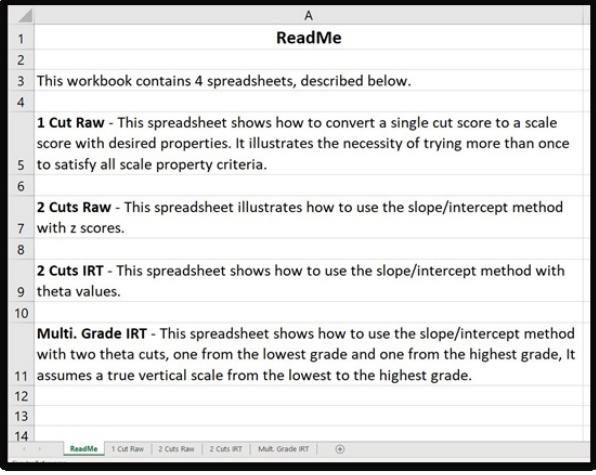
 **Please Open:**
Planning and Conducting Standard Setting: Appendix E Additional Files

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

Worksheet

Worksheet (Slide Layer)

Worksheet: Scaling Methods



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

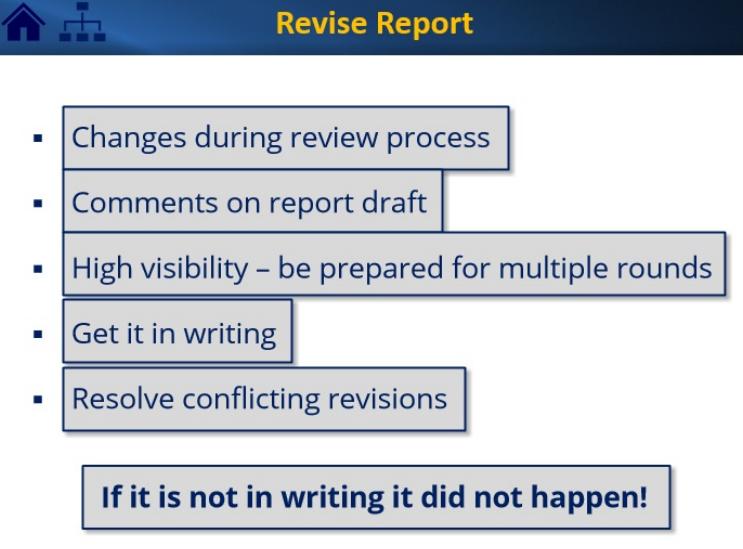
13

14

ReadMe | 1 Cut Raw | 2 Cuts Raw | 2 Cuts IRT | Multi. Grade IRT | Back

5.22 After: SS Revise Report

Revise Report



- 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

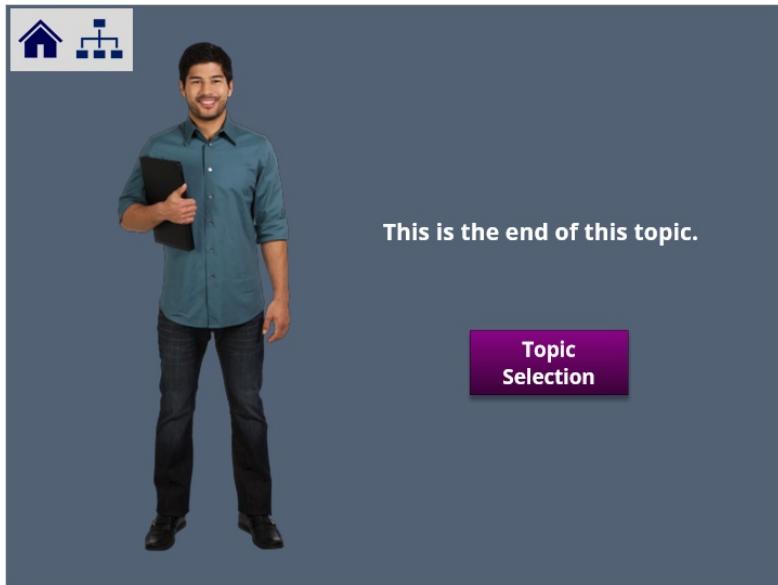
5.26 After: SS More Stuff

 **More Stuff**

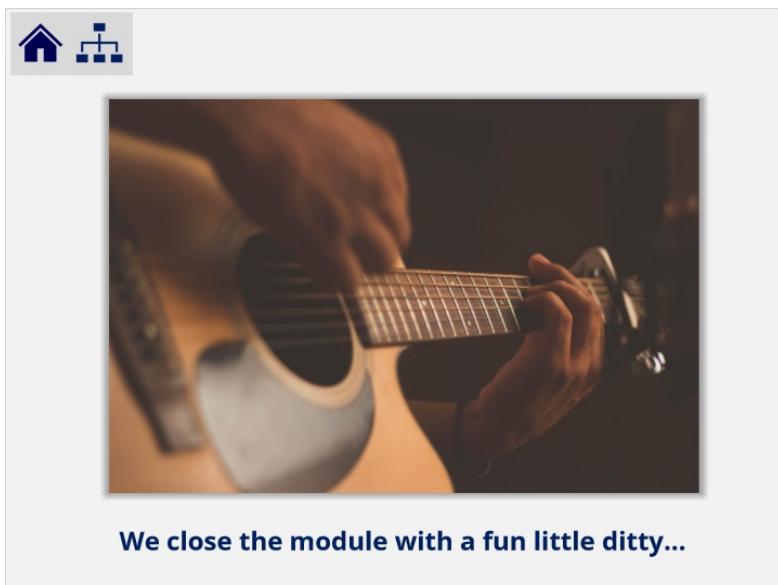
- Post results
- Debrief
- Update methodology
- Write an article or paper?
- Exhale

A graphic featuring a blue arrow pointing left labeled "STRESS" and a green arrow pointing right labeled "RELAX". There are also some small newspaper clippings scattered around the arrows.

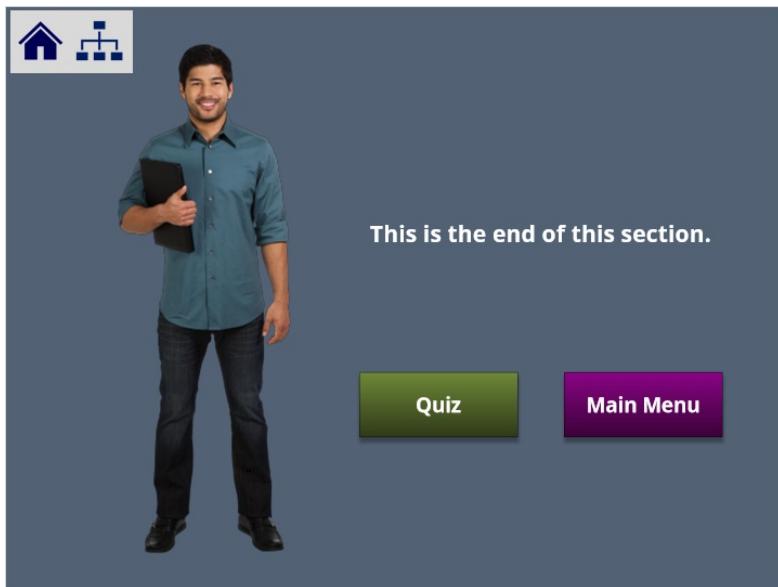
5.27 Bookend: SS After Other Activities



5.28 Fun Song



5.29 Bookend: Section 4 (SS After)



5.30 Module Cover (END)

