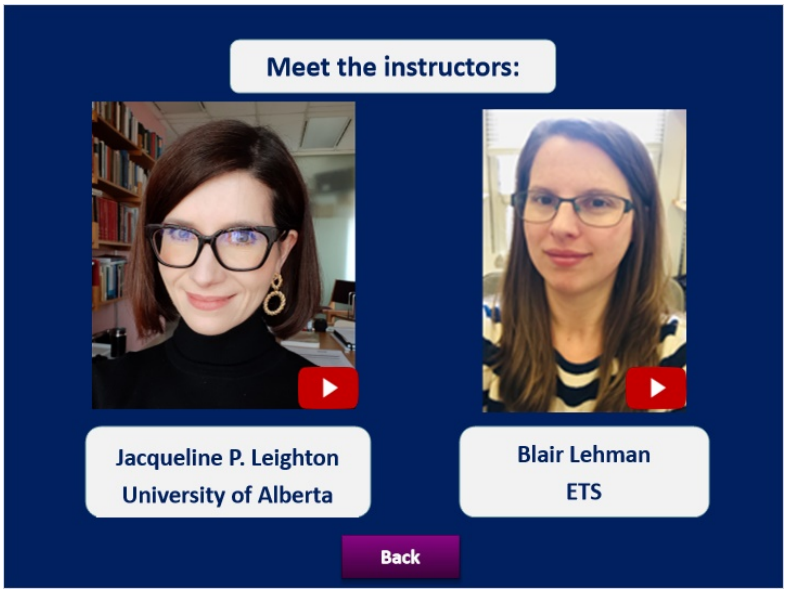
DM12 SLIDES (Verbal Reports, Version 1.1)

1. Module Overview

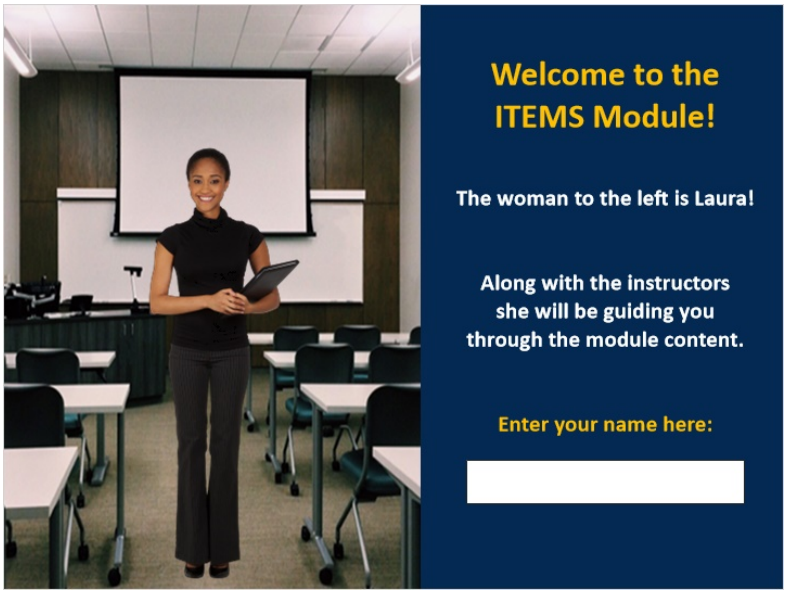
1.1 Module Cover

1.2 Instructors

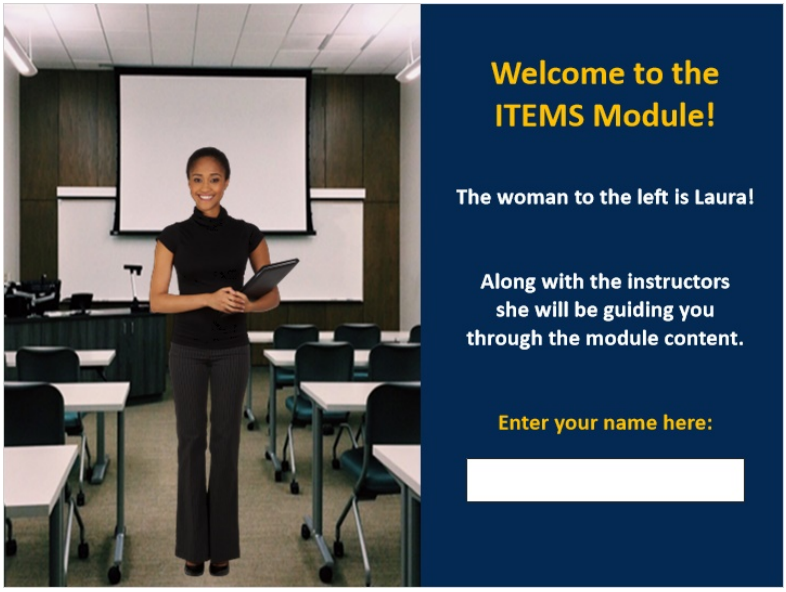


1.3 Designers

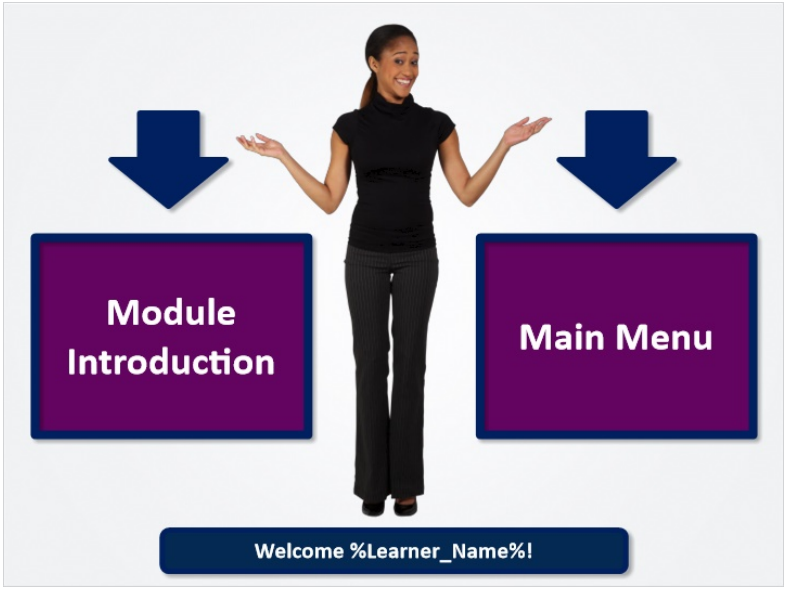
1.4 Welcome



Untitled Layer 1 (Slide Layer)



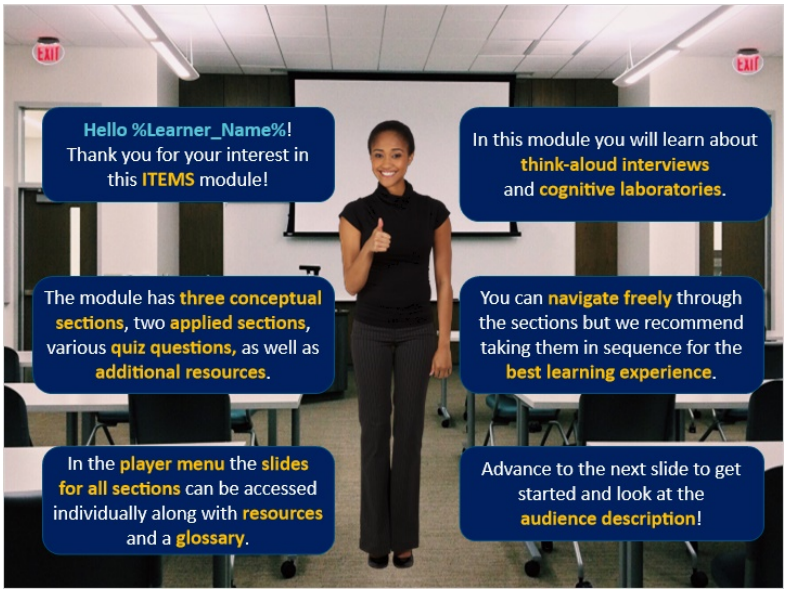
1.5 Path Choice



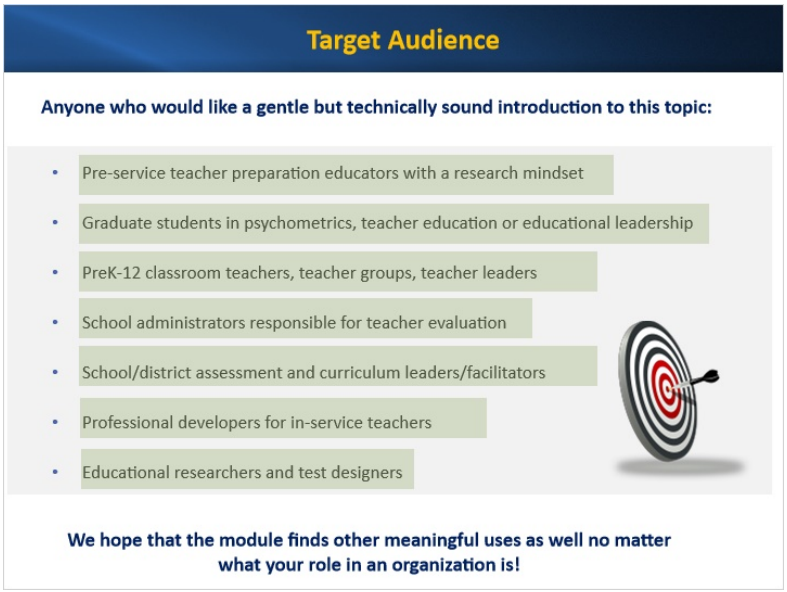
1.6 Main Menu

Navigation (Slide Layer)

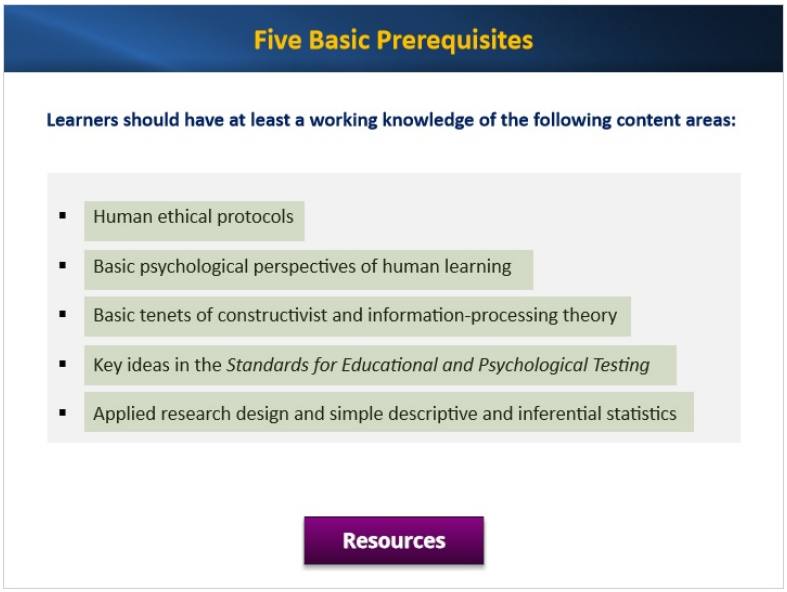
1.7 Overview



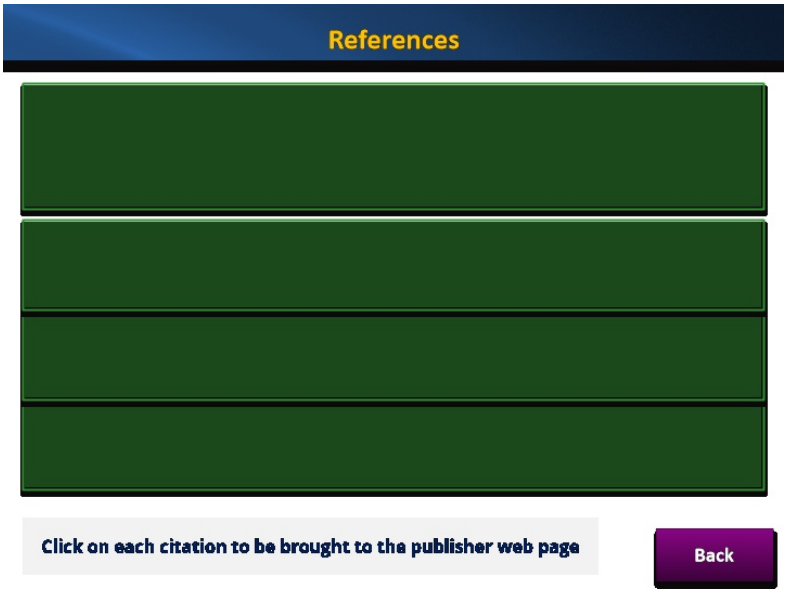
1.8 Target Audience



1.9 Prerequisites

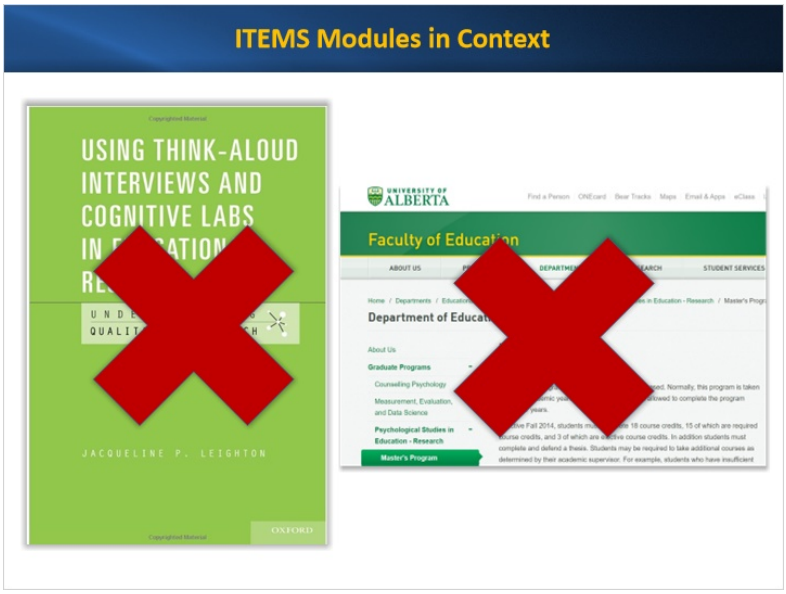


Resources (Slide Layer)

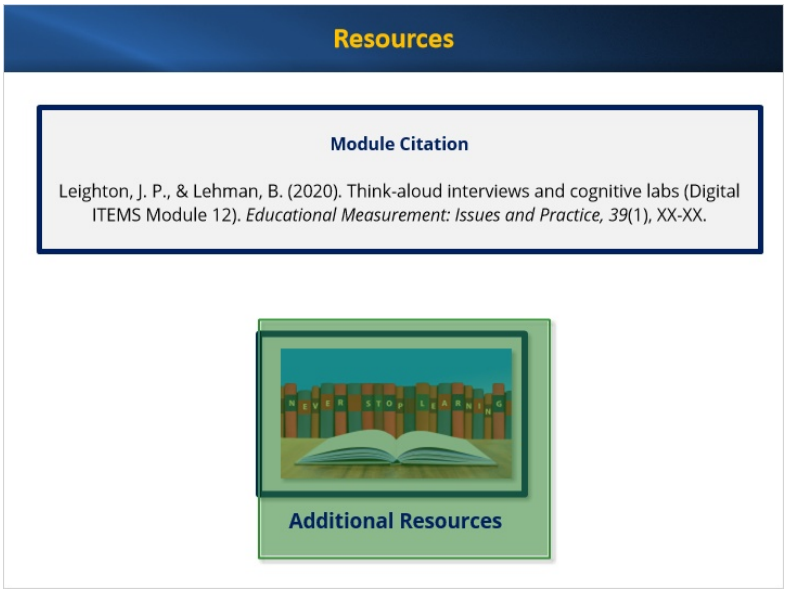


1.10 Expecations (I)

1.11 Expectations (II)



1.12 Resources



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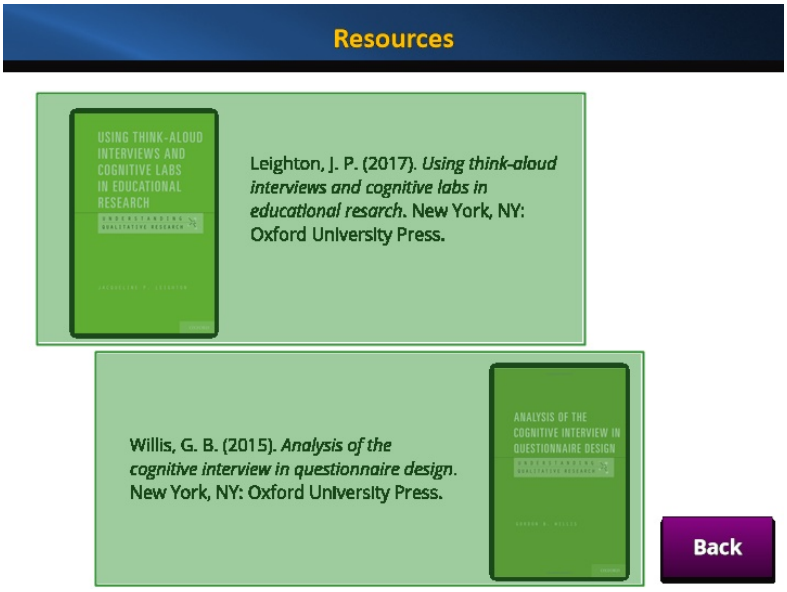
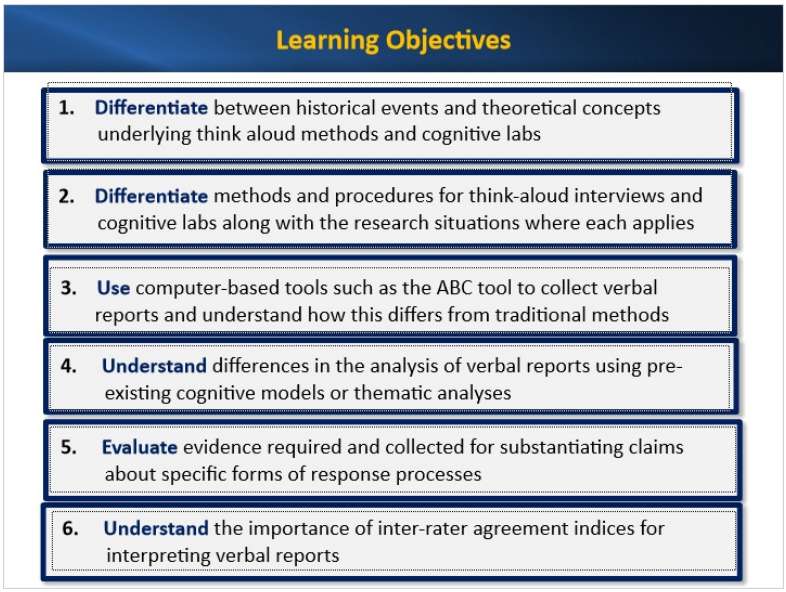


1.13 Objectives

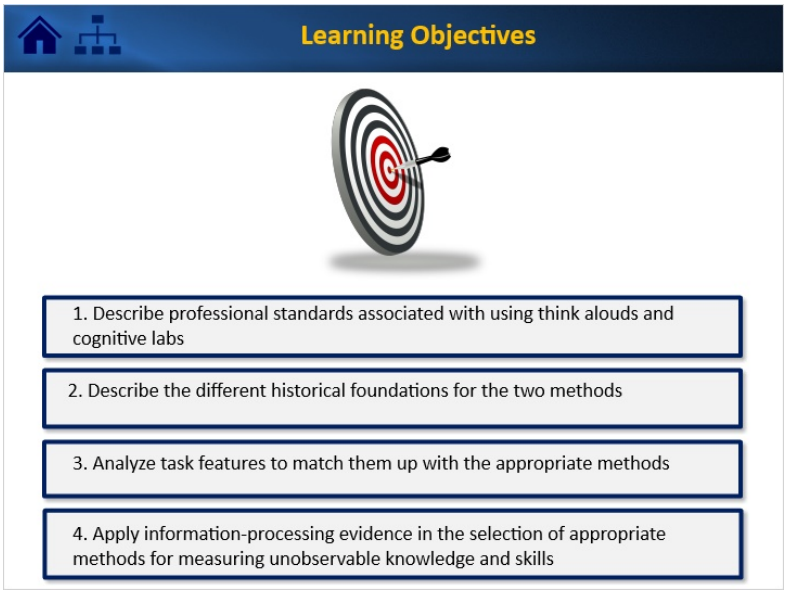


1.14 Copyright Statements

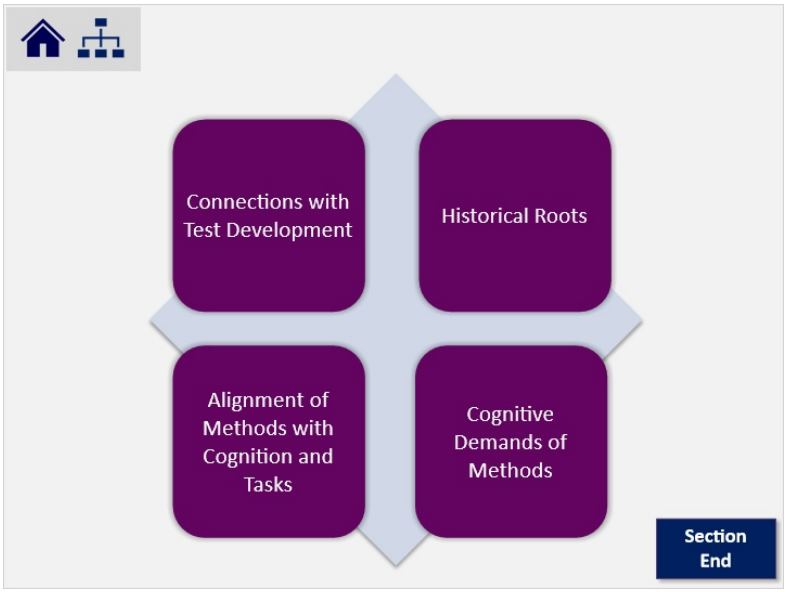
2. Section 1: Conceptual Foundations

2.1 Cover: Section 1

2.2 Objectives: Section 1

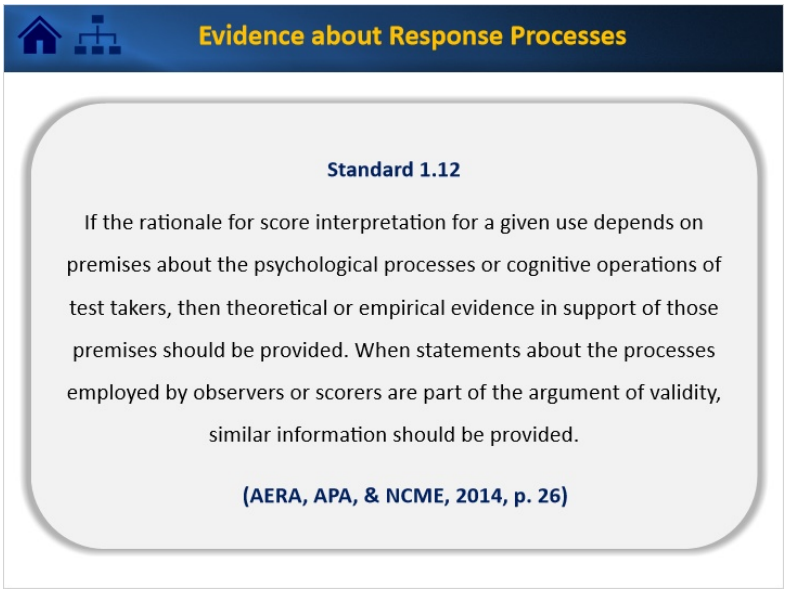


2.3 Topic Selection

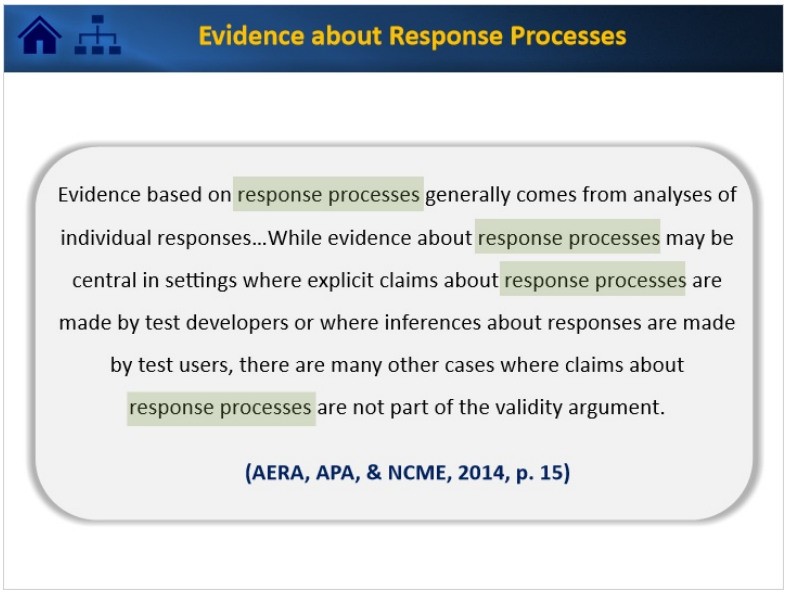


2.4 Bookmark: Standards

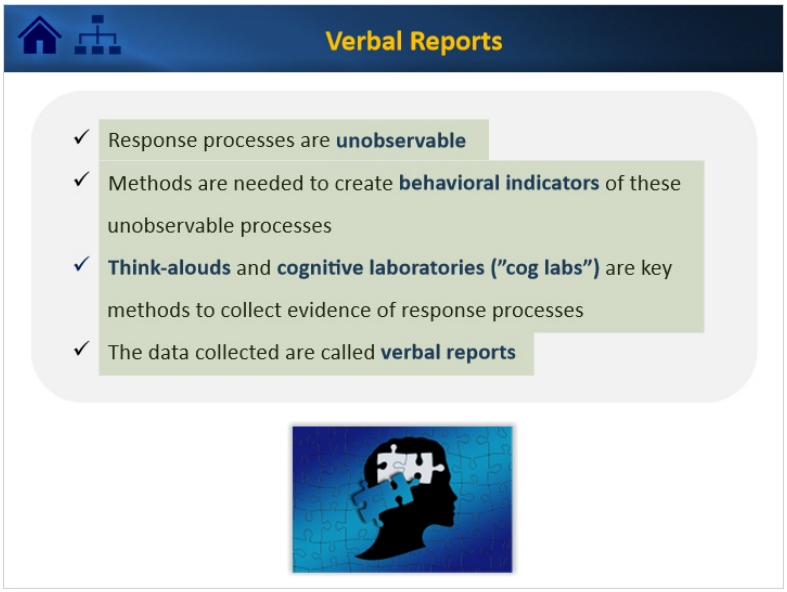
2.5 Standards I



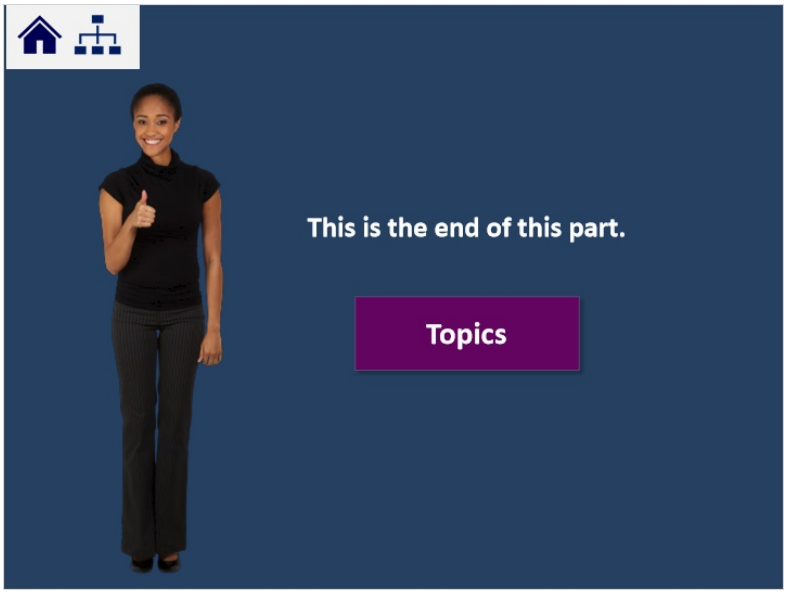
2.6 Standards II



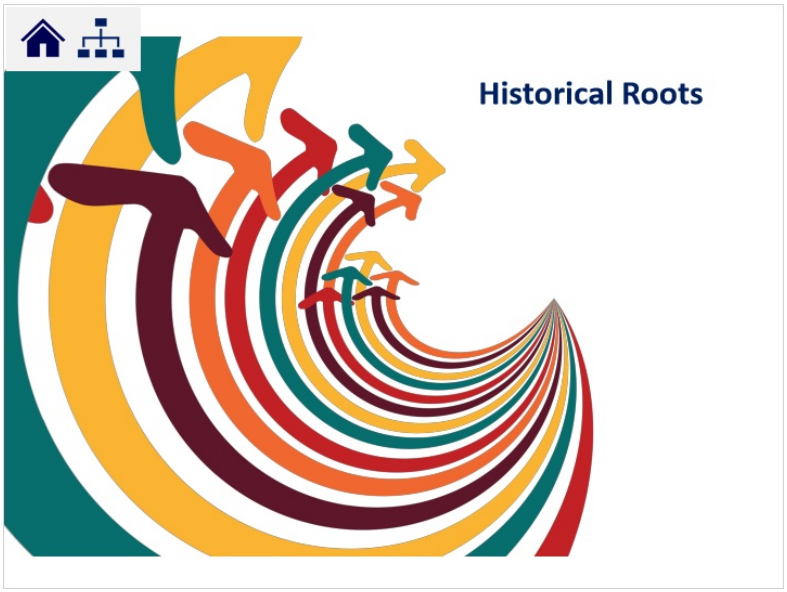
2.7 Standards III



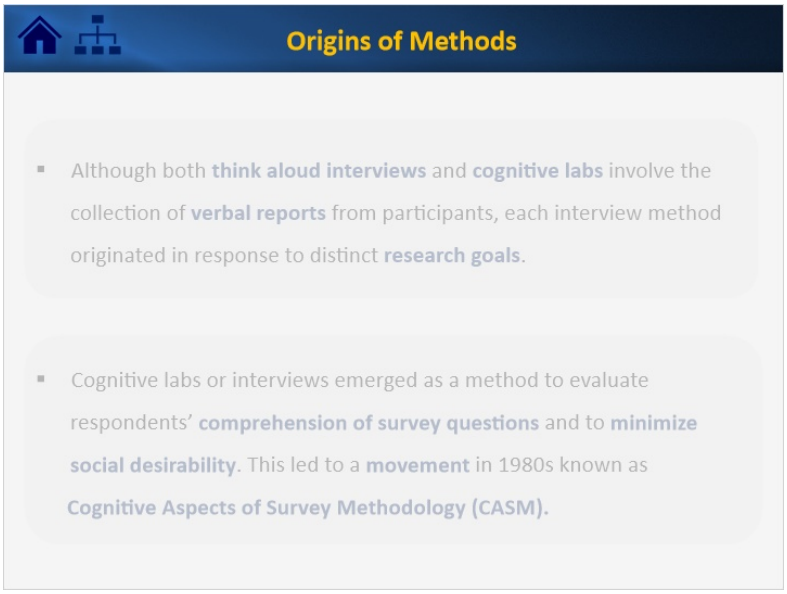
2.8 Bookend:Professional Standards



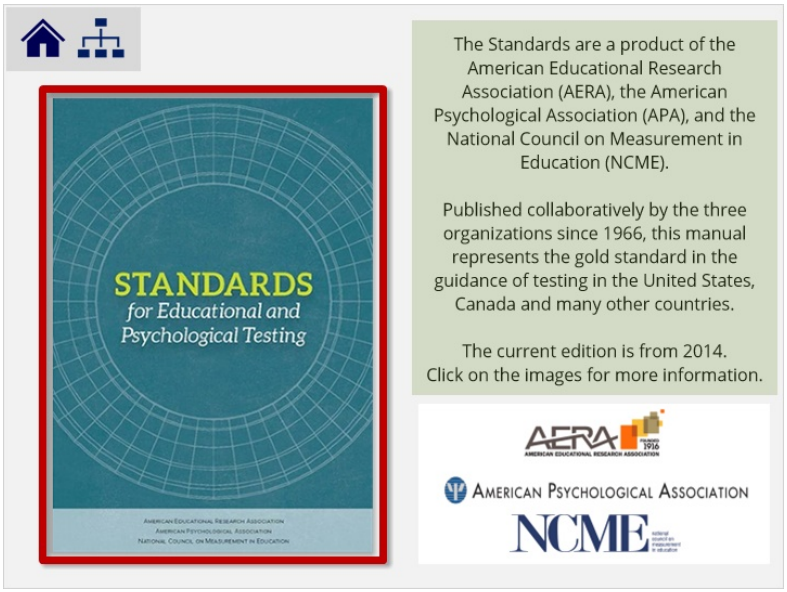
2.9 Bookmark: Historical Roots



2.10 Orgins of Methods



2.11 Untitled Slide



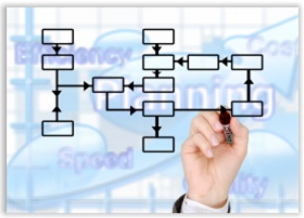
2.12 Orgins of Cog Labs

2.13 Origins of Think-alouds

Think-aloud Interviews

Think-aloud interviews emerged as a method to **validate information-processing models** of human problem-solving

(Ericsson & Simon, 1980,1993)



2.14 Origins II

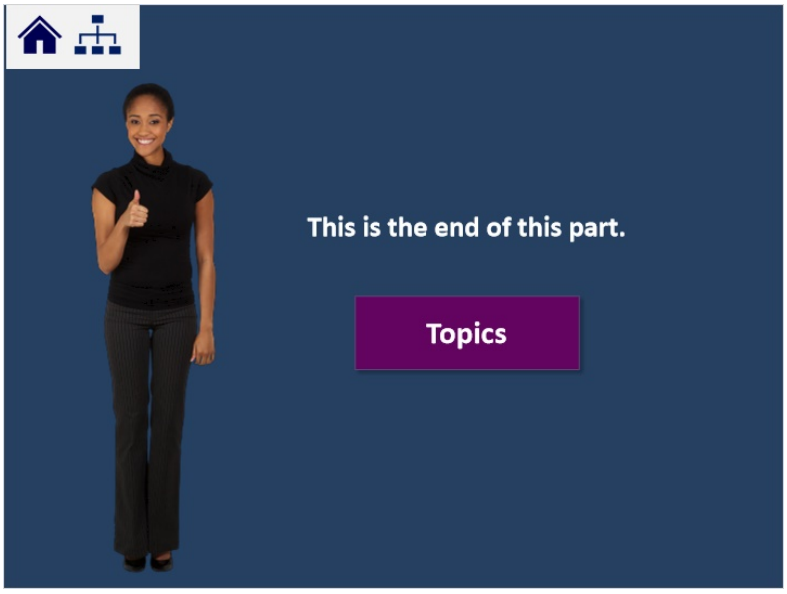
Implications

- One perspective is that these distinctions are **purely historical** and **semantical / terminological**.

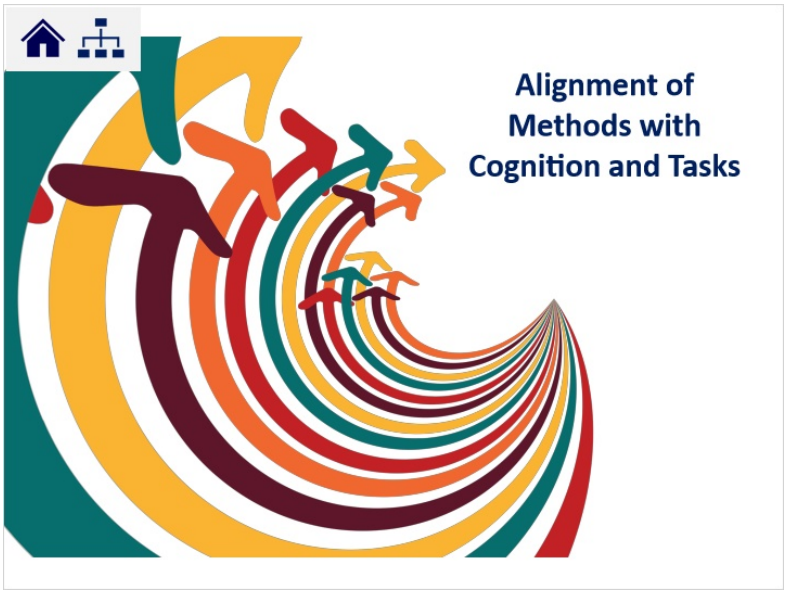
- It matters insofar as each is linked to **differences in rigor** for collecting evidence about **different types of cognitive processes**.

- It is critical that investigators **fully disclose their procedures** so that the rigor can be independently assessed **no matter what method is used**.

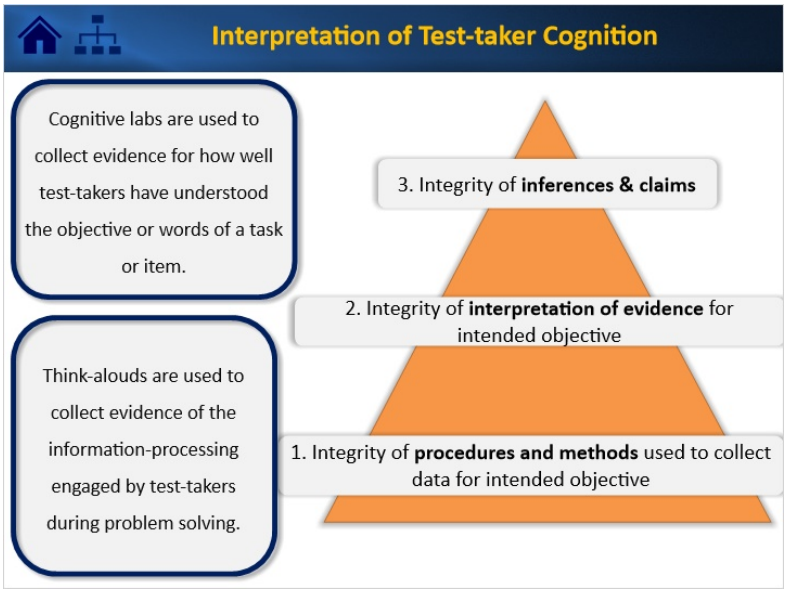
2.15 Bookend: Test Development



2.16 Bookmark: Task and Method Alignment

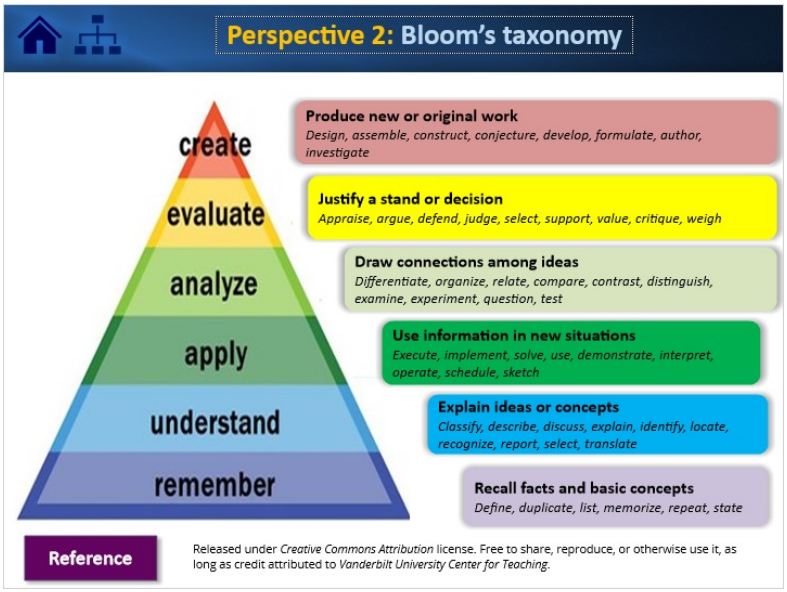


2.17 Interpretation of Test-taker Cognition



2.18 Research Goals

2.19 Bloom's Taxonomy



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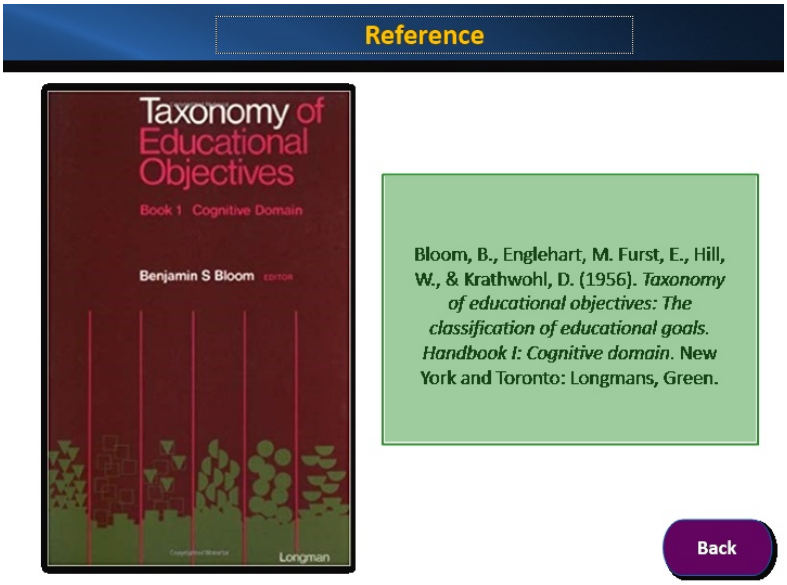
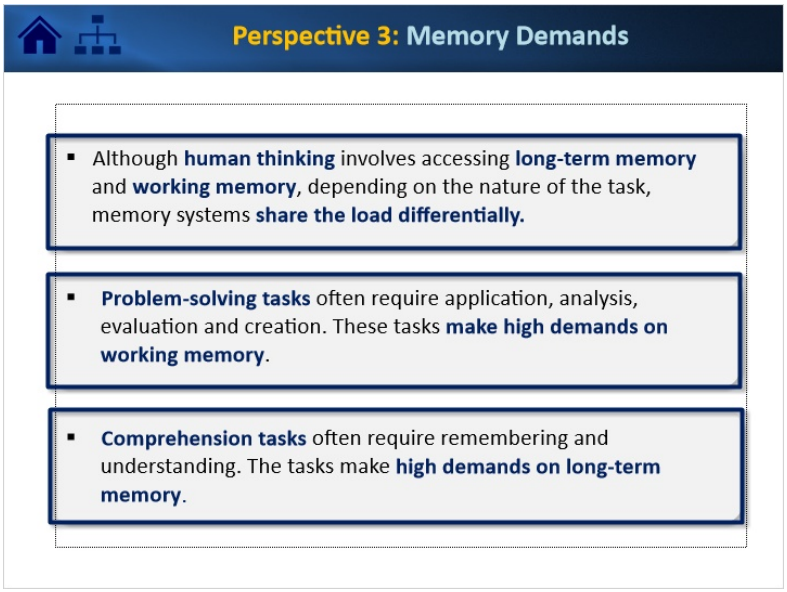
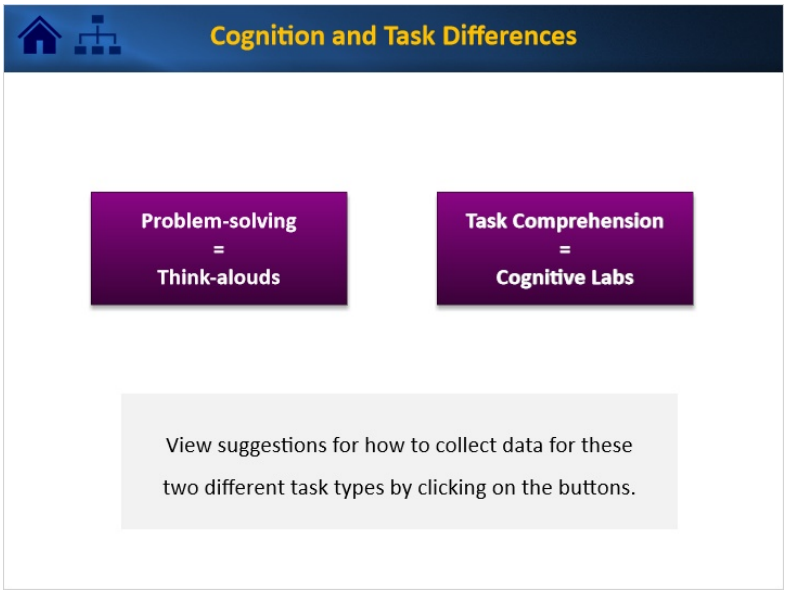


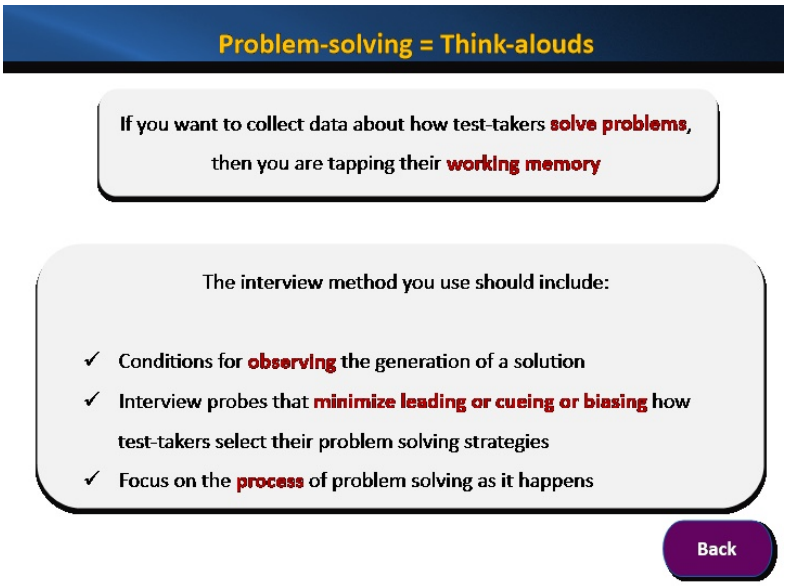
2.20 Memory Demands



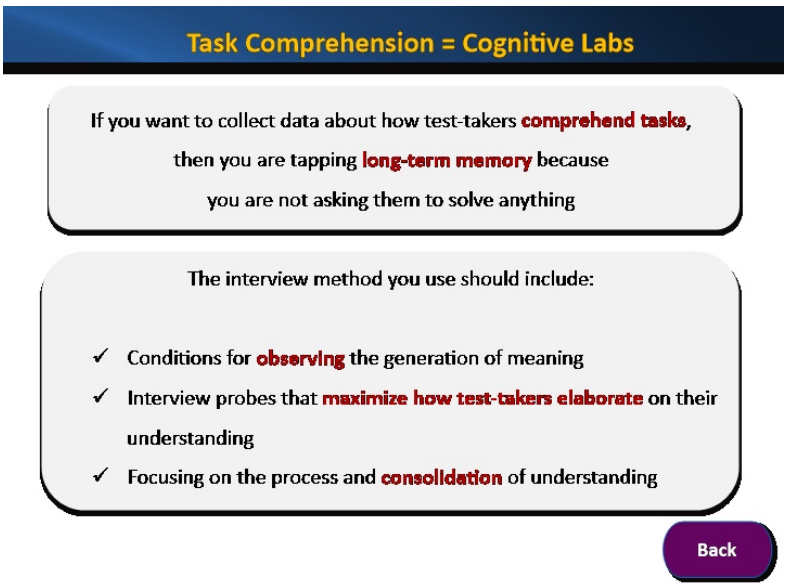
2.21 Method Choice



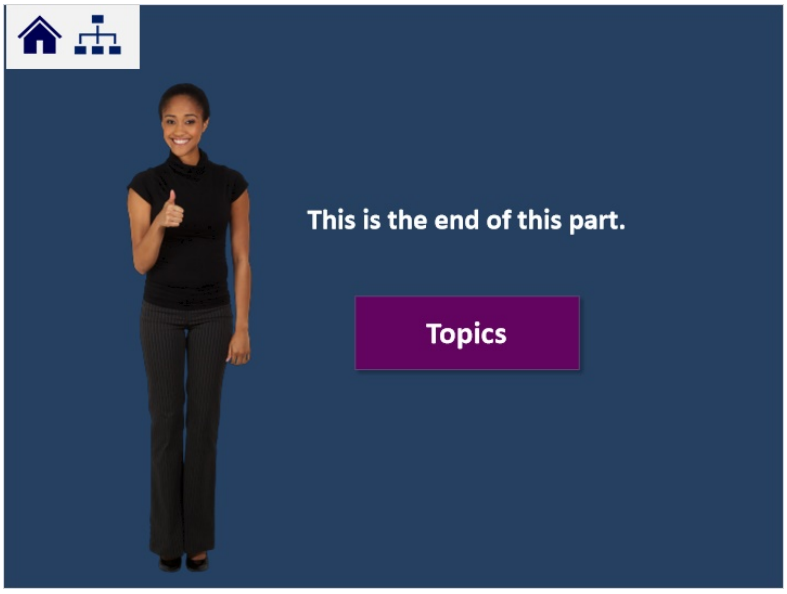
Problem solving (Slide Layer)



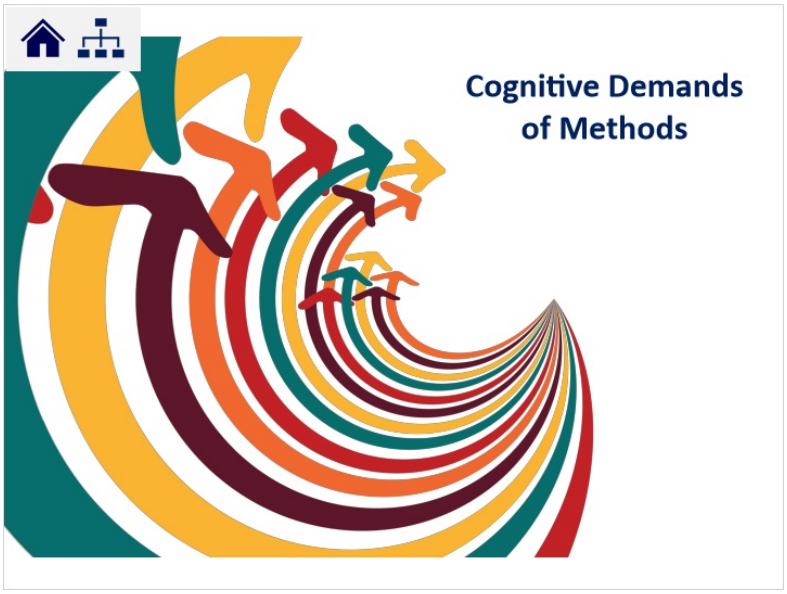
Task comprehension (Slide Layer)



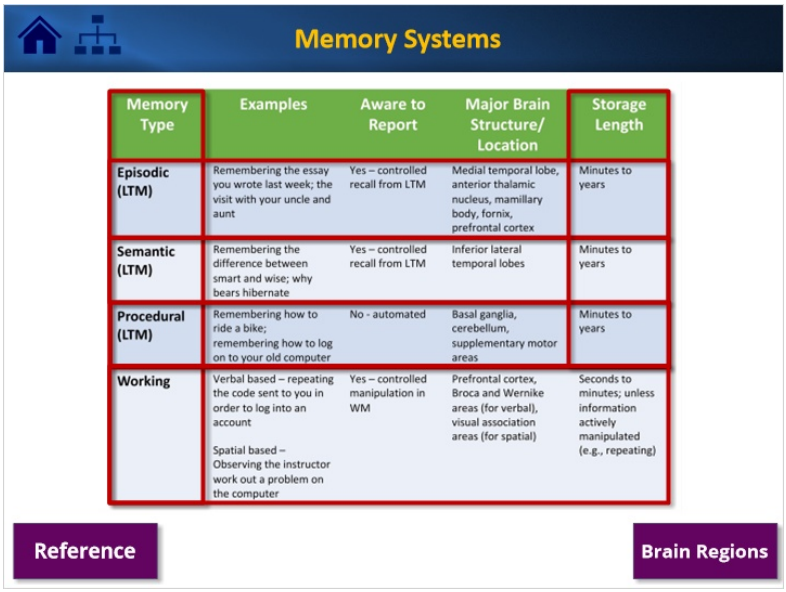
2.22 Bookend: Section 1



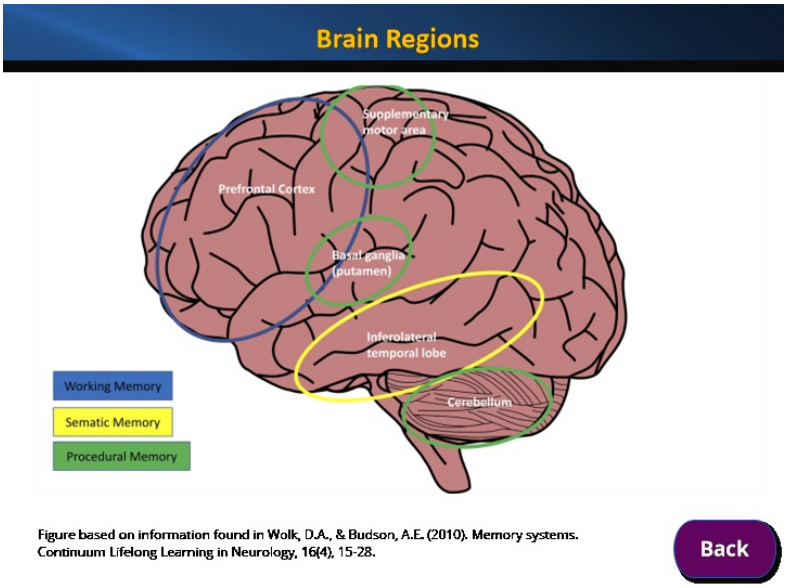
2.23 Bookmark: Memory and Cognition



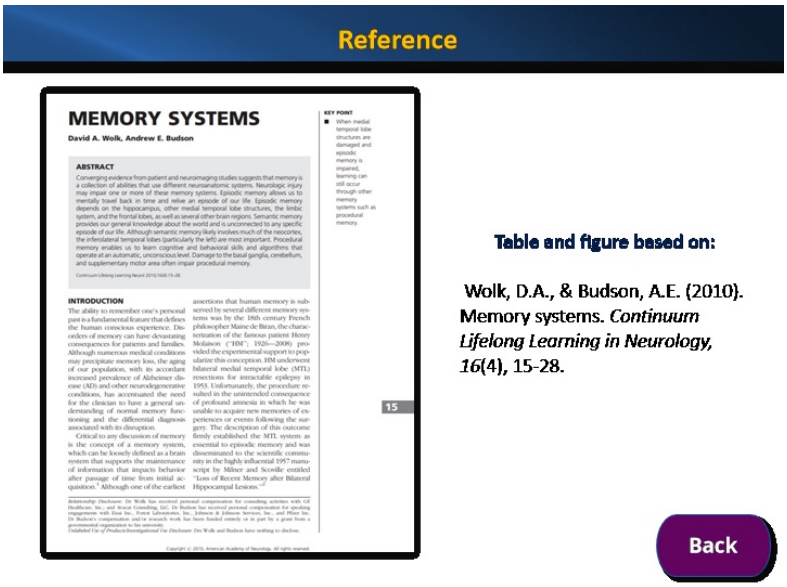
2.24 Memory System



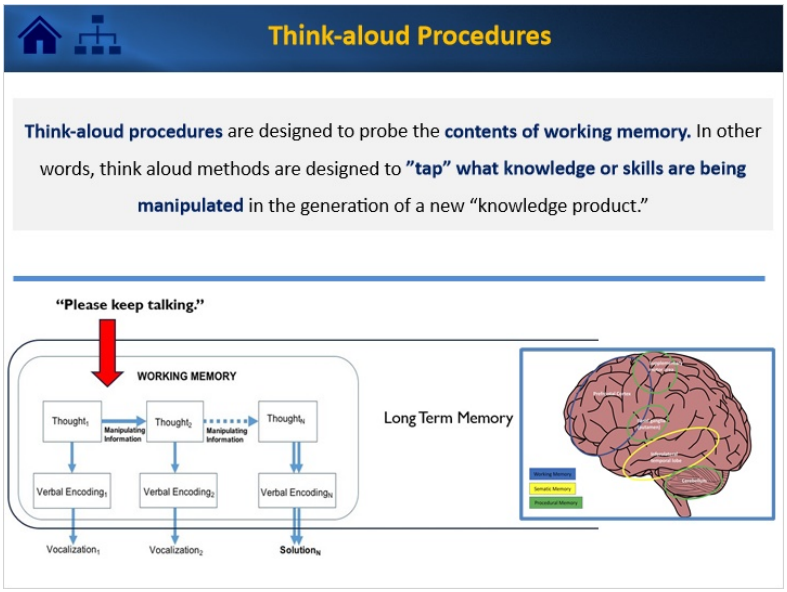
Brain (Slide Layer)



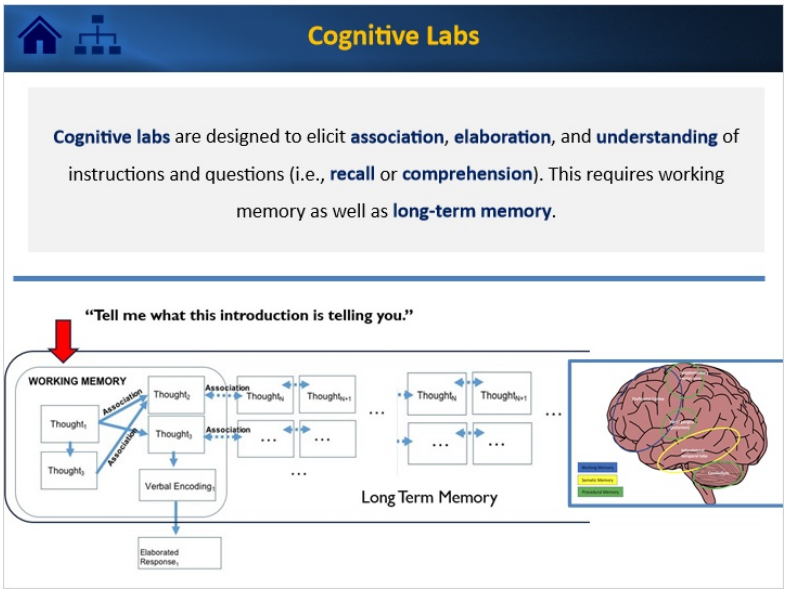
Reference (Slide Layer)



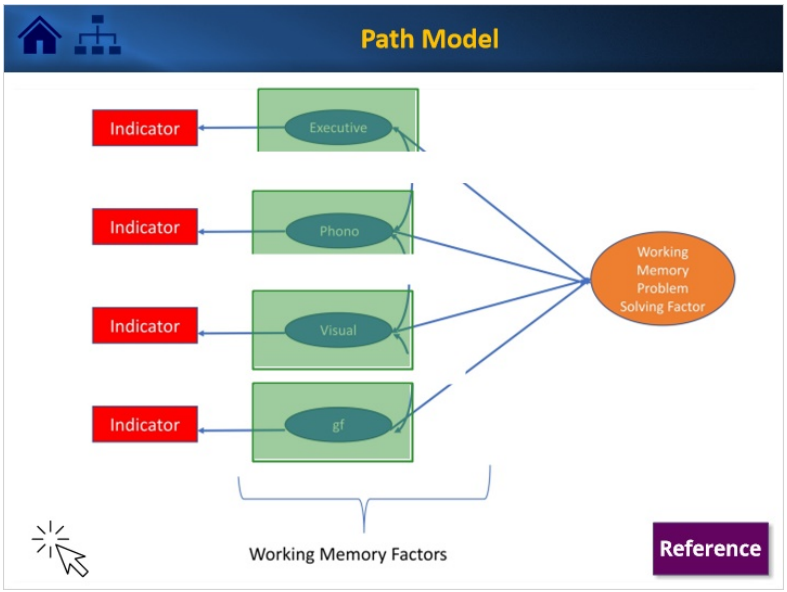
2.25 Think-alouds



2.26 Cognitive Labs



2.27 Path Model Example



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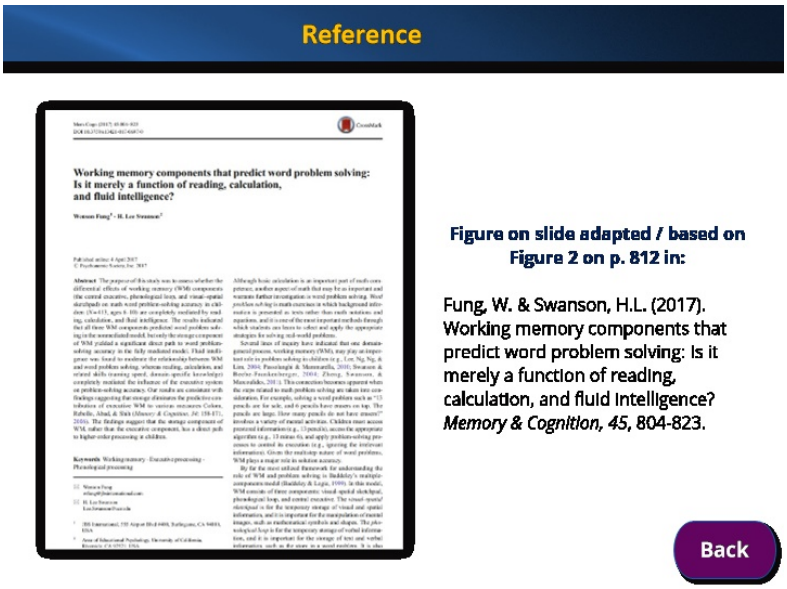
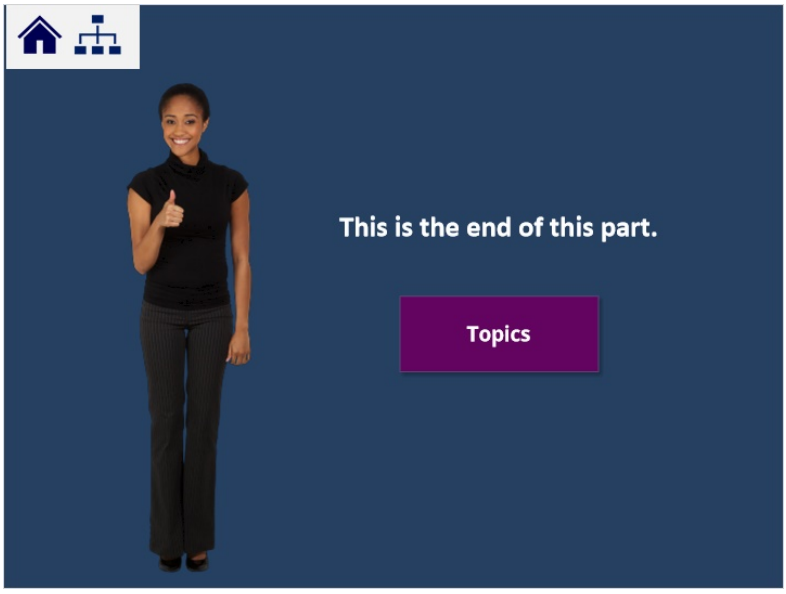
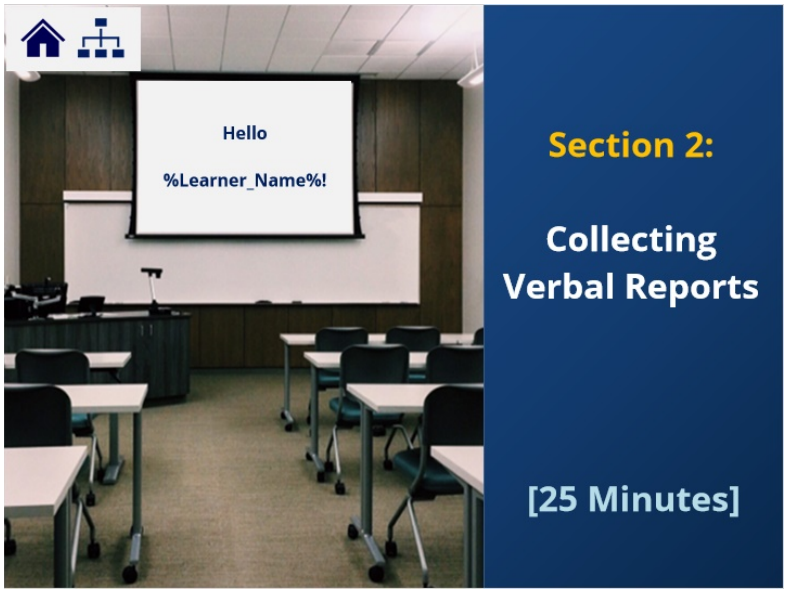


2.28 Bookmark: Memory and Cognition

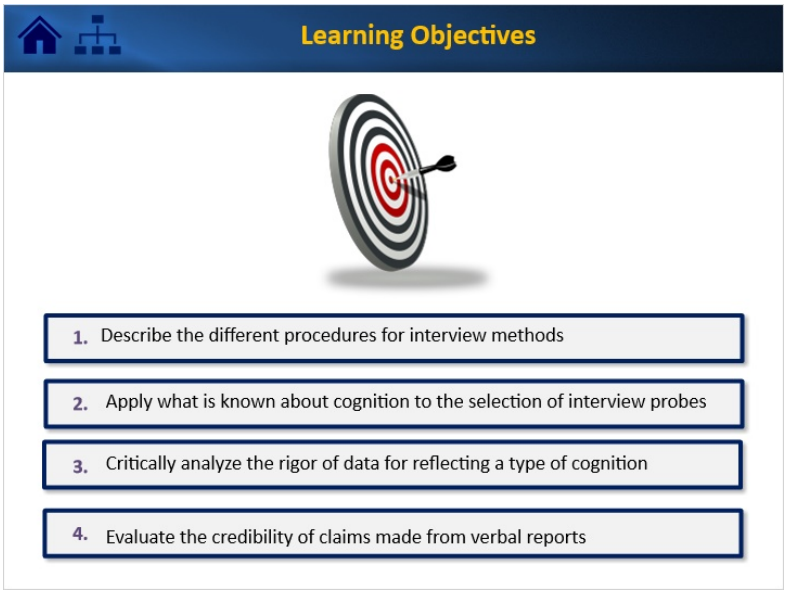


3. Section 2: Collecting Verbal Reports

3.1 Cover: Section 2



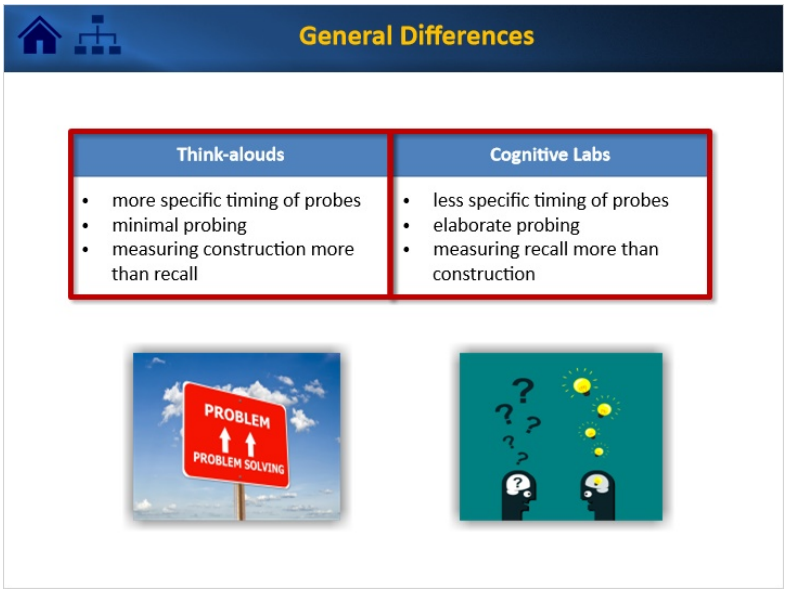
3.2 Objectives: Section 3



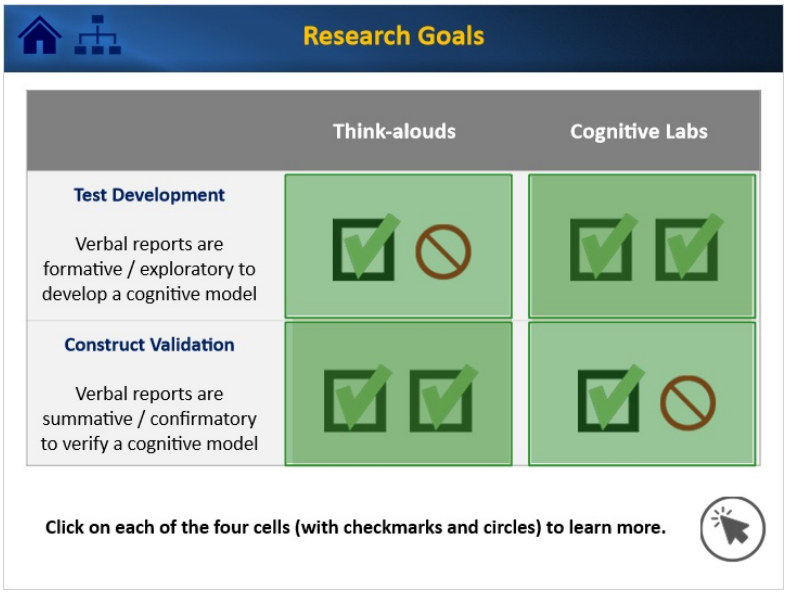
3.3 Topic Selection

3.4 Bookmark: Method Differences

3.5 Overview



3.6 Research Goals



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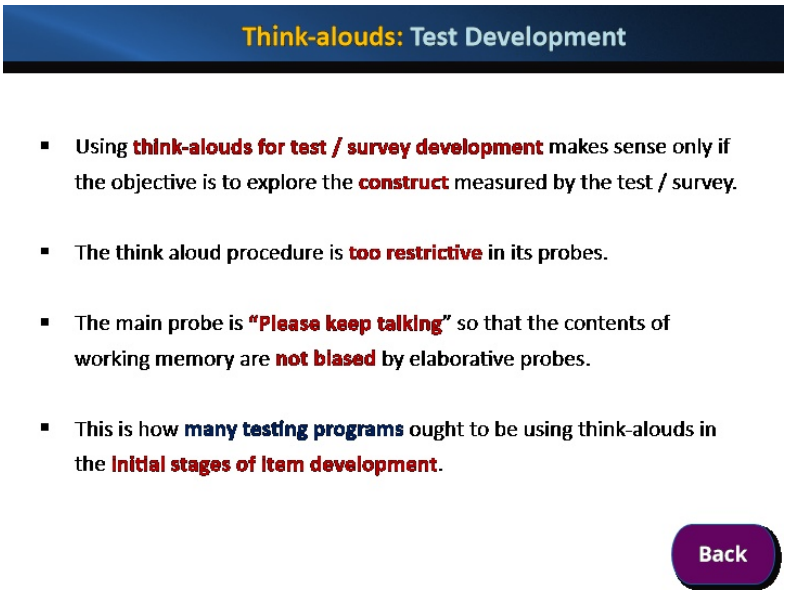

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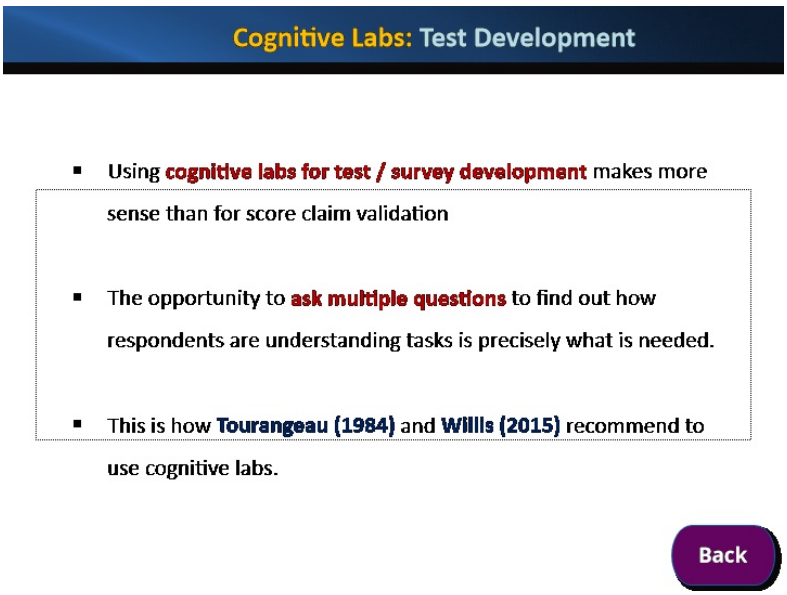

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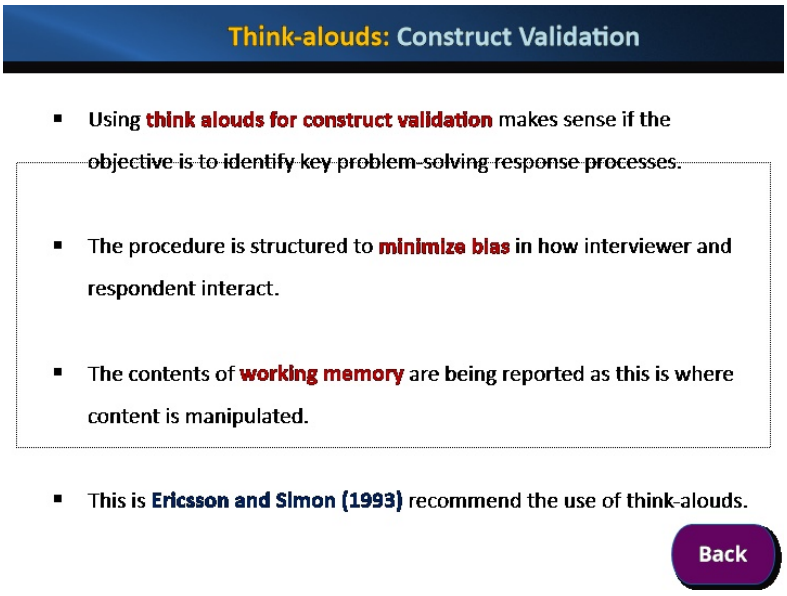

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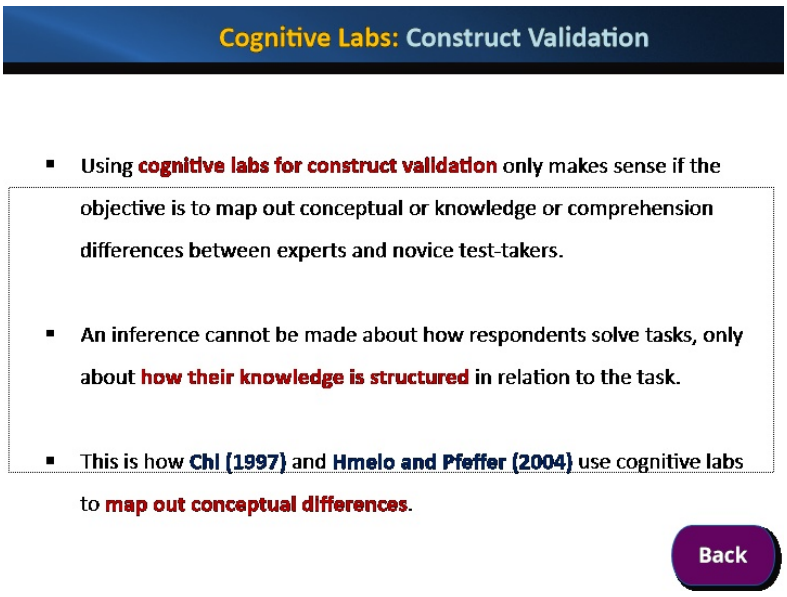
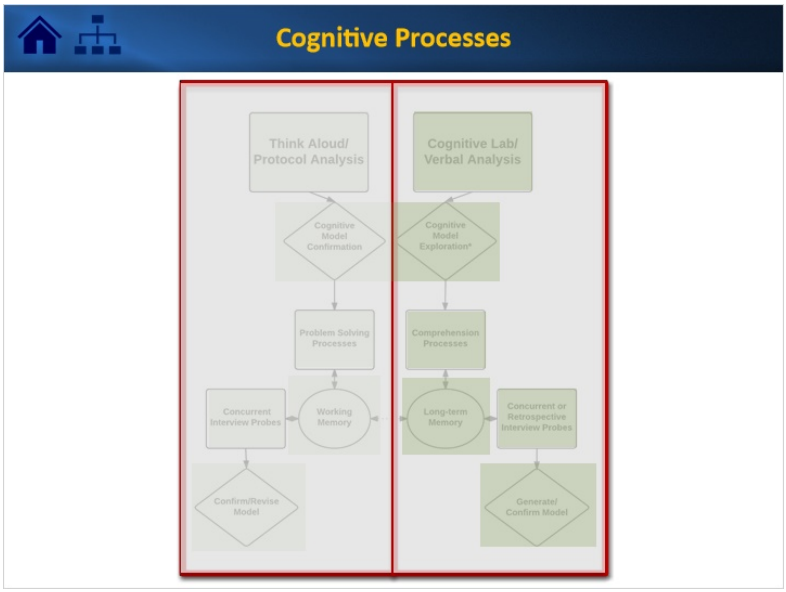
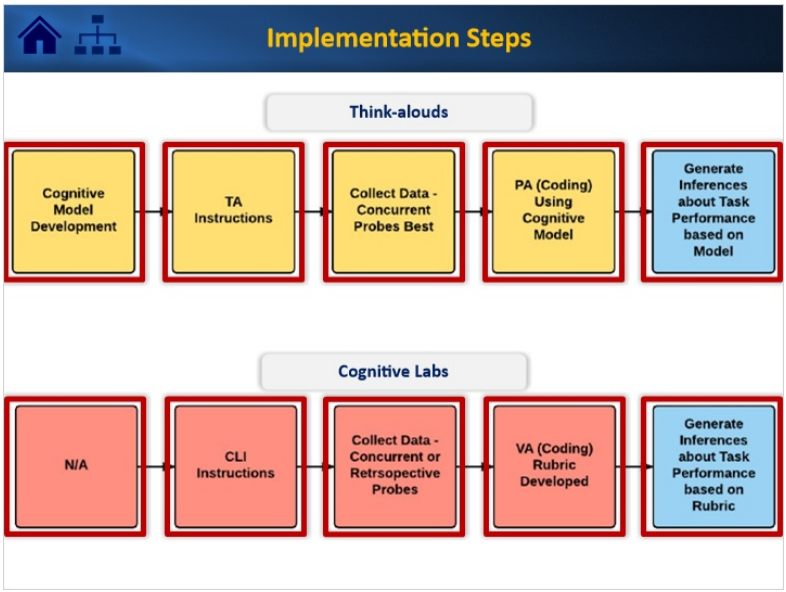


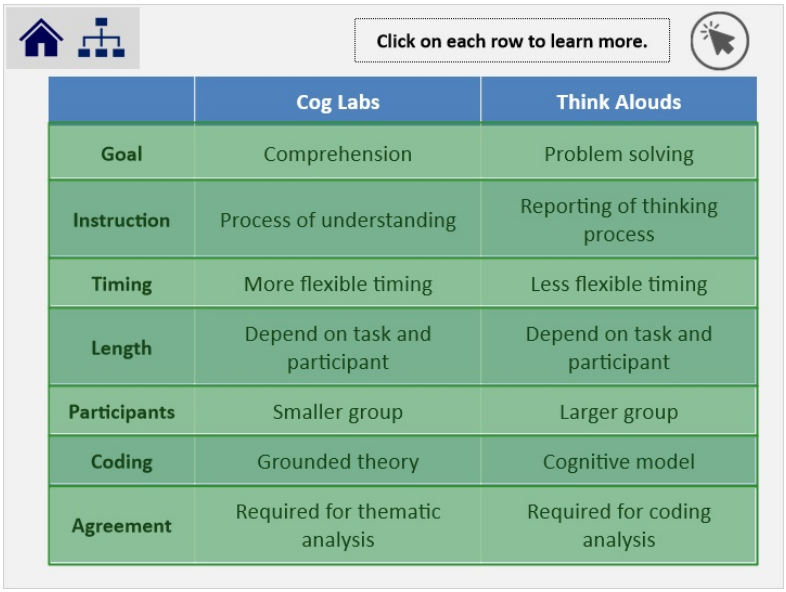
3.7 Cognitive Processes



3.8 Implementation Steps

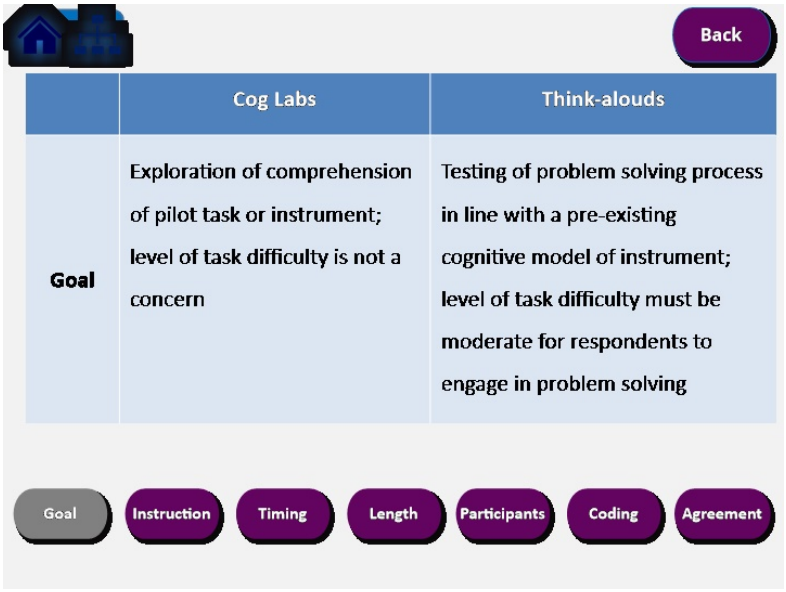


3.9 Summary I



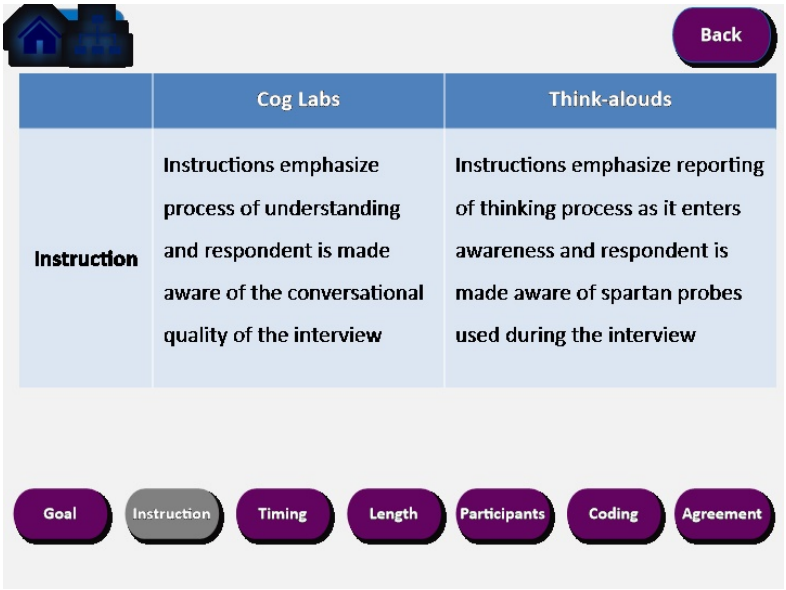
	Cog Labs	Think Alouds
Goal	Comprehension	Problem solving
Instruction	Process of understanding	Reporting of thinking process
Timing	More flexible timing	Less flexible timing
Length	Depend on task and participant	Depend on task and participant
Participants	Smaller group	Larger group
Coding	Grounded theory	Cognitive model
Agreement	Required for thematic analysis	Required for coding analysis

Goal (Slide Layer)

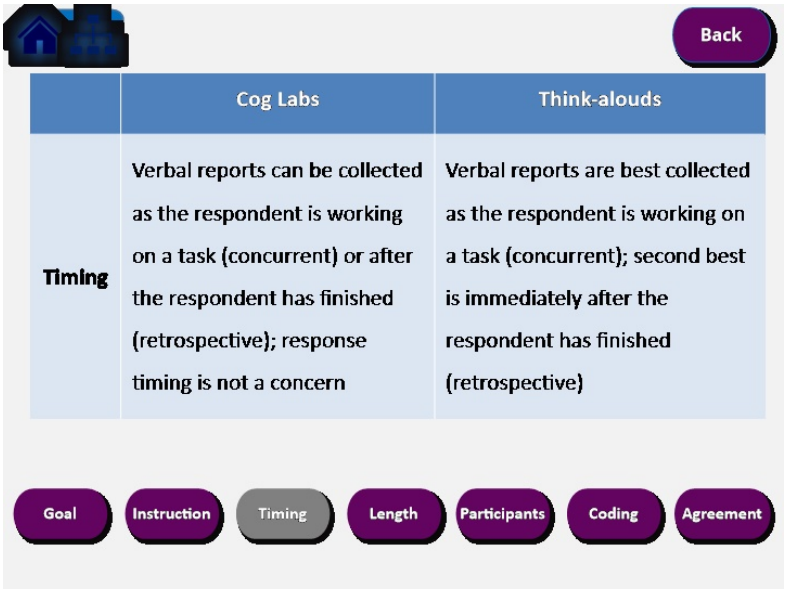


	Cog Labs	Think-alouds
Goal	Exploration of comprehension of pilot task or instrument; level of task difficulty is not a concern	Testing of problem solving process in line with a pre-existing cognitive model of instrument; level of task difficulty must be moderate for respondents to engage in problem solving

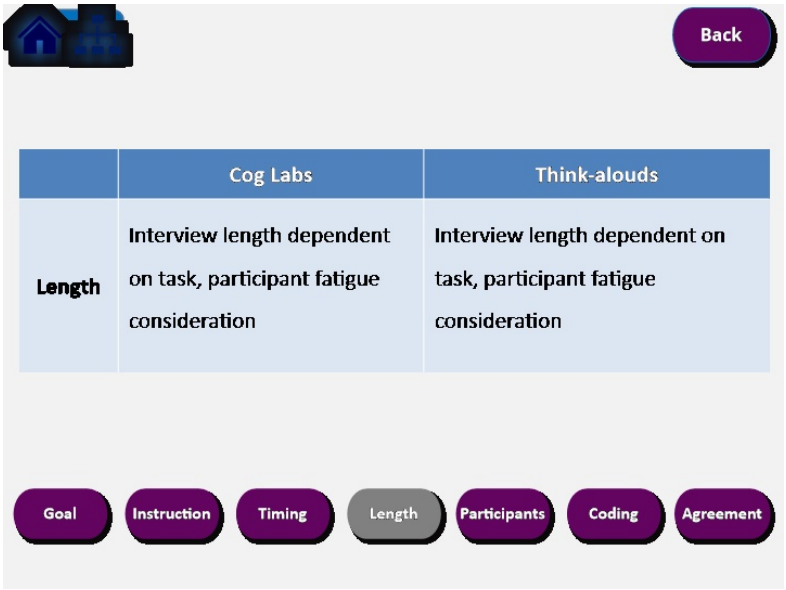
Instruction (Slide Layer)



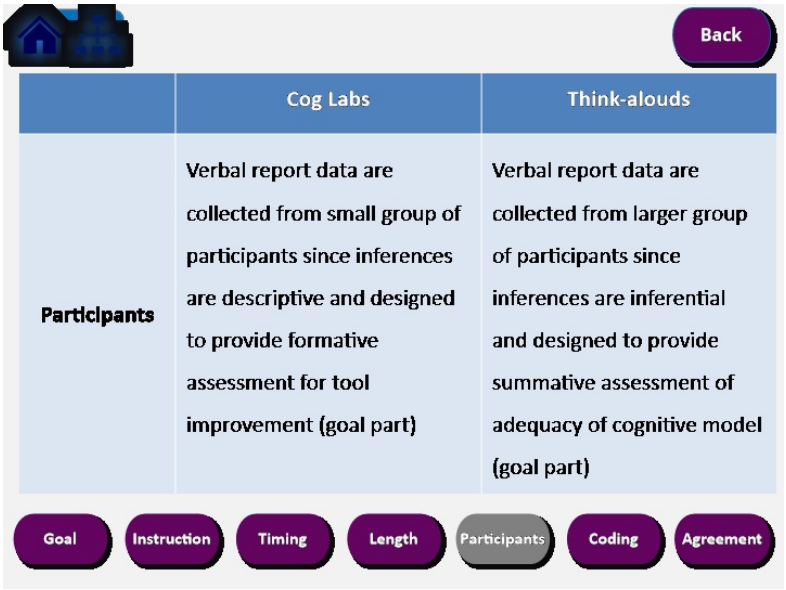
Timing (Slide Layer)



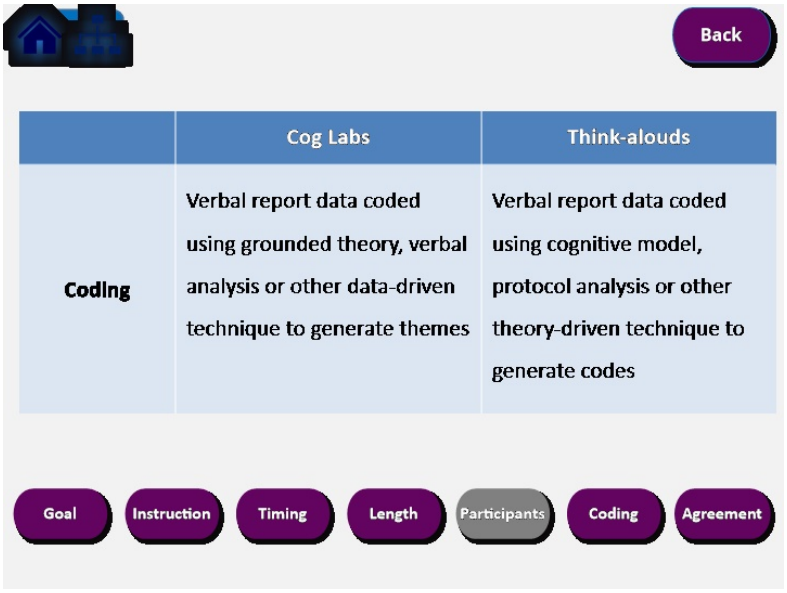
Length (Slide Layer)



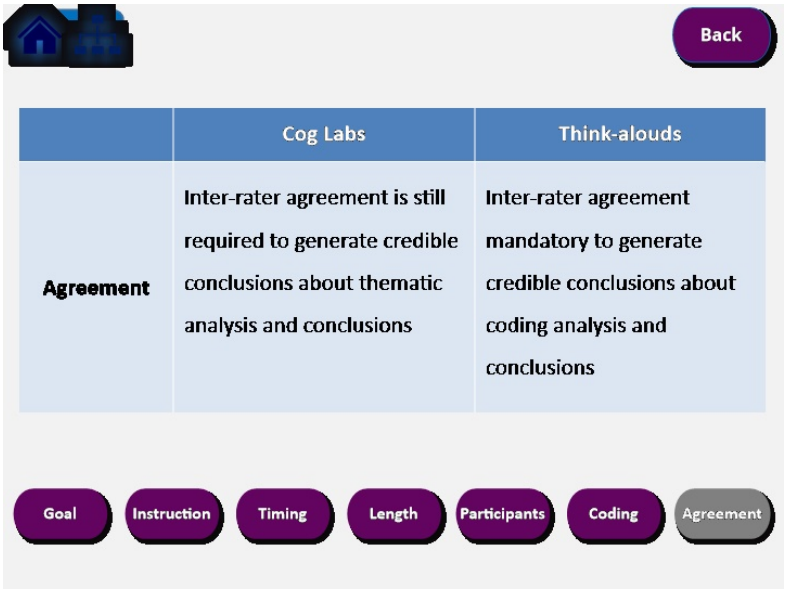
Participants (Slide Layer)



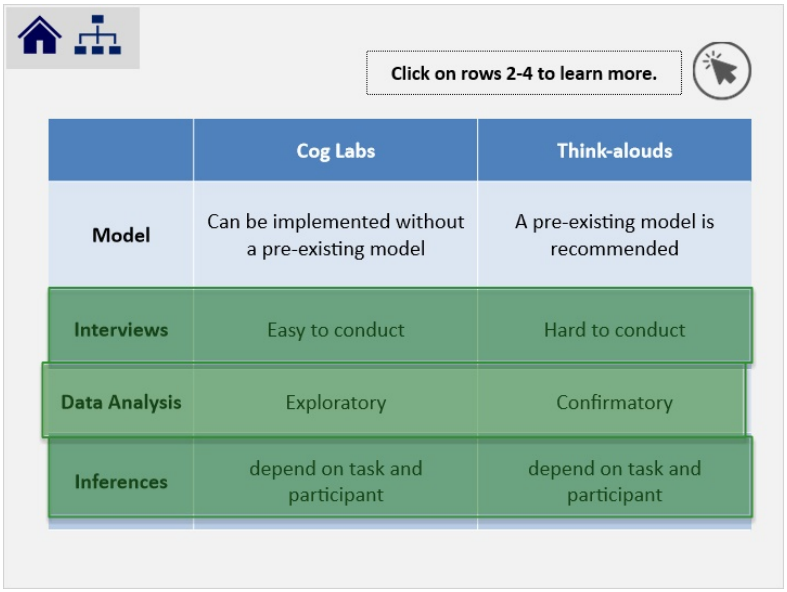
Coding (Slide Layer)



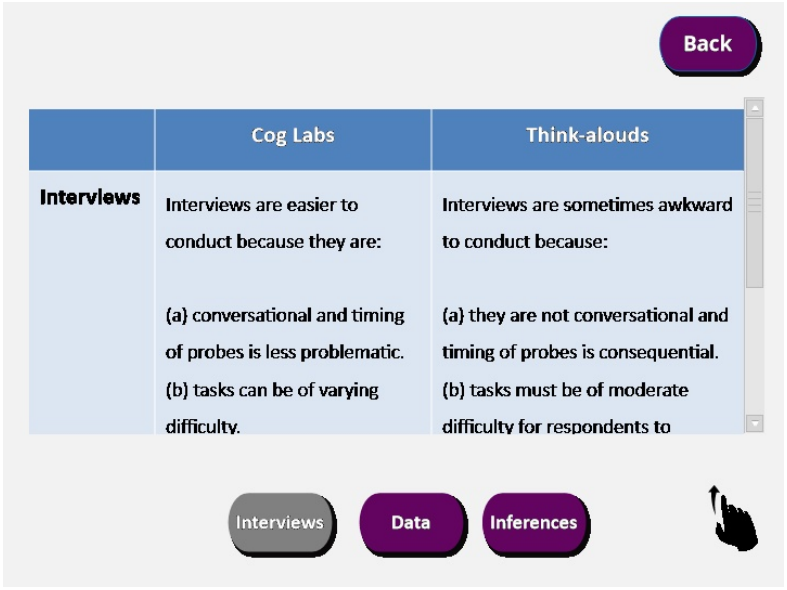
Agreement (Slide Layer)



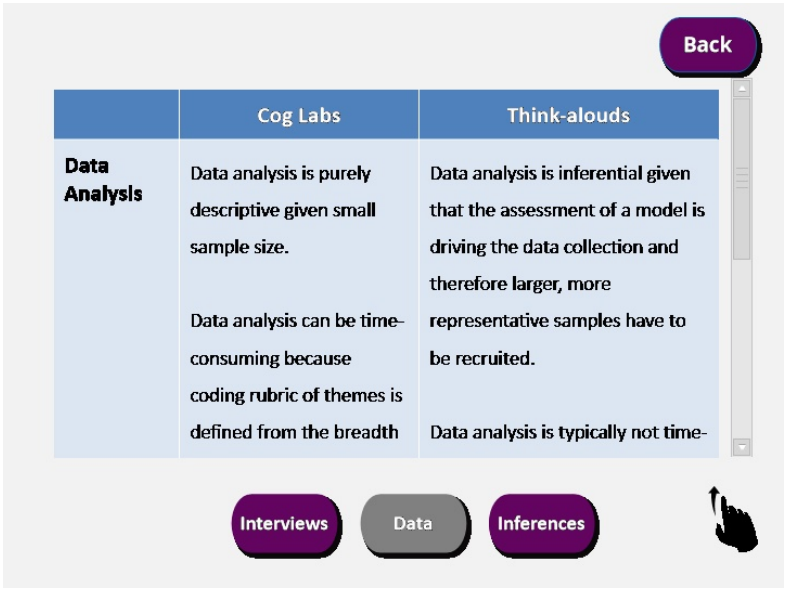
3.10 Summary II



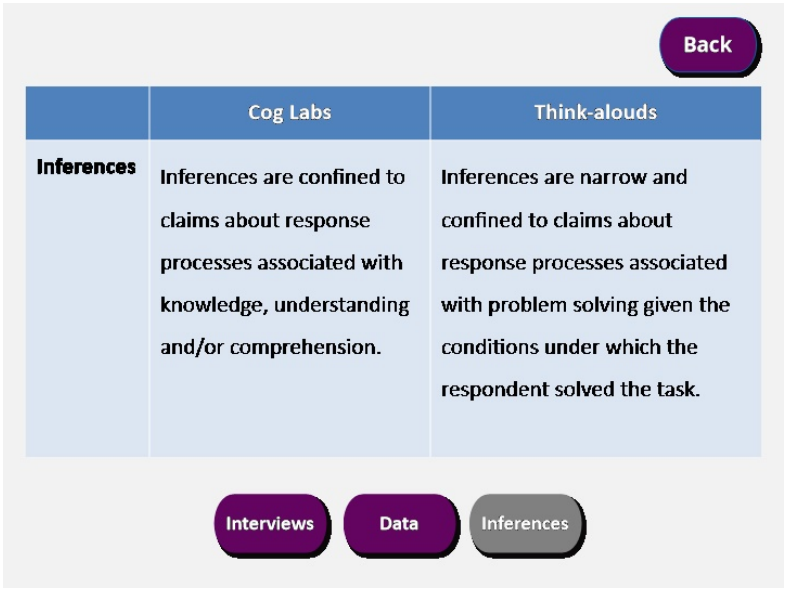
Interviews (Slide Layer)



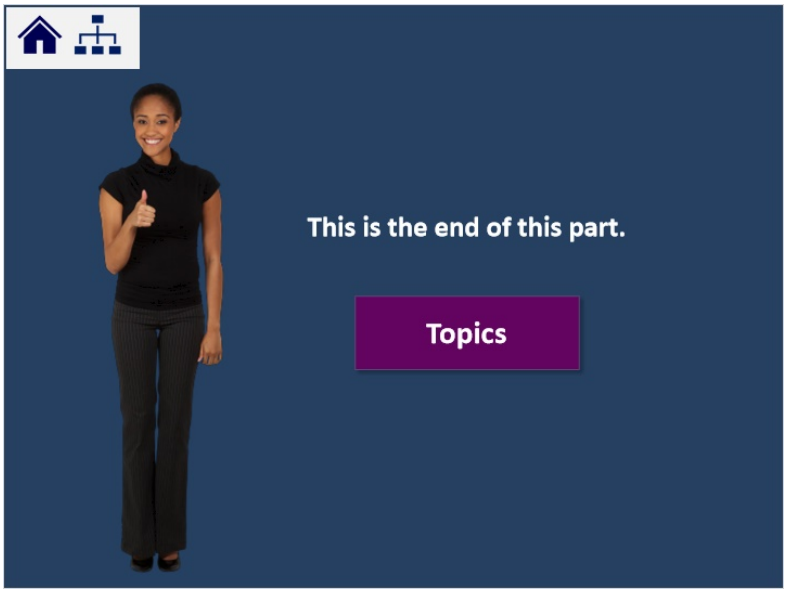
Data Anaylsis (Slide Layer)



Inferences (Slide Layer)



3.11 Bookend: Method Differences

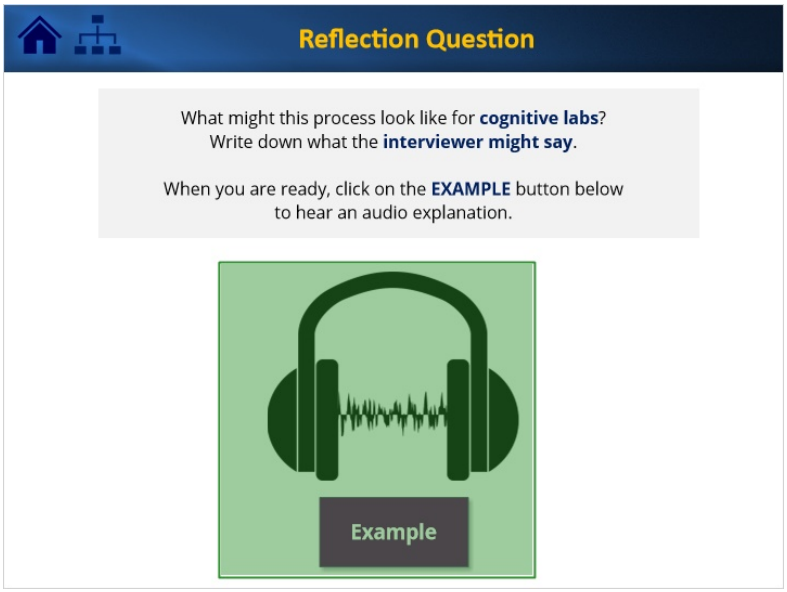


3.12 Bookmark: Traditional Methods

3.13 Think-alouds I

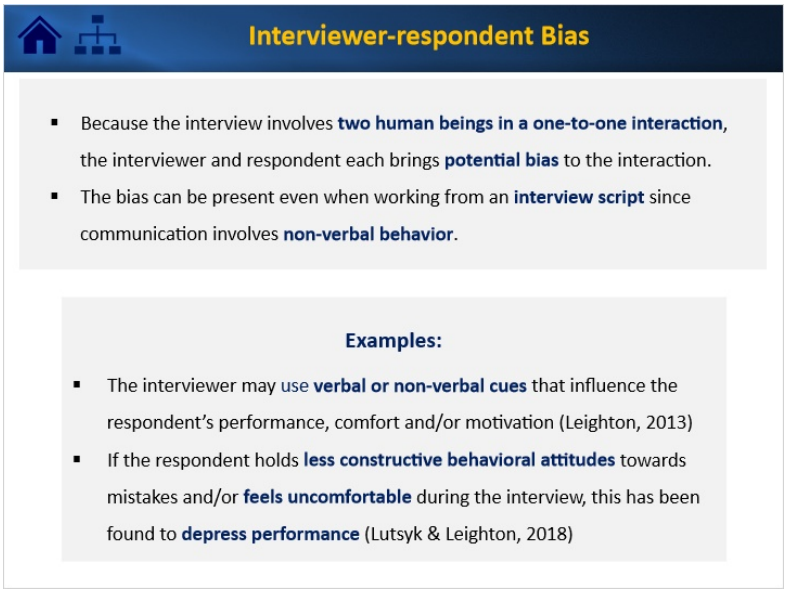
3.14 Think-alouds II

3.15 Cognitive Labs

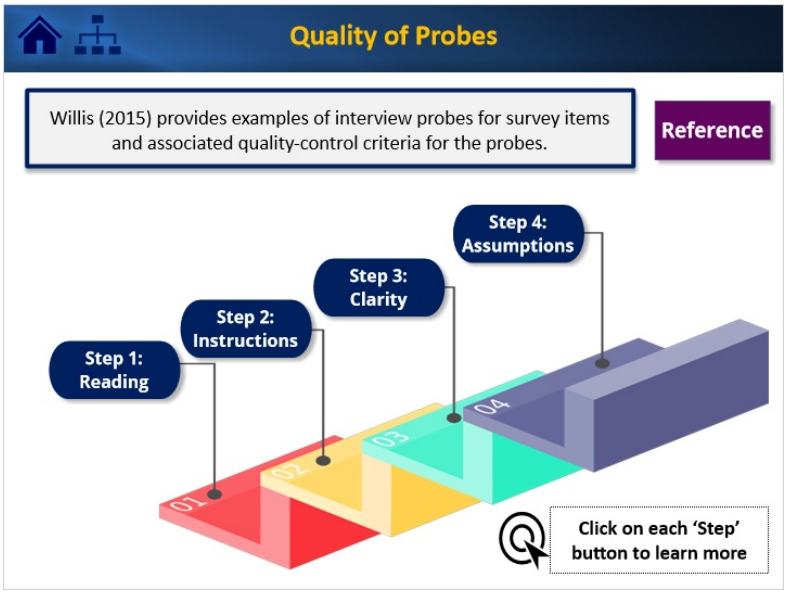


3.16 Interview Concerns I

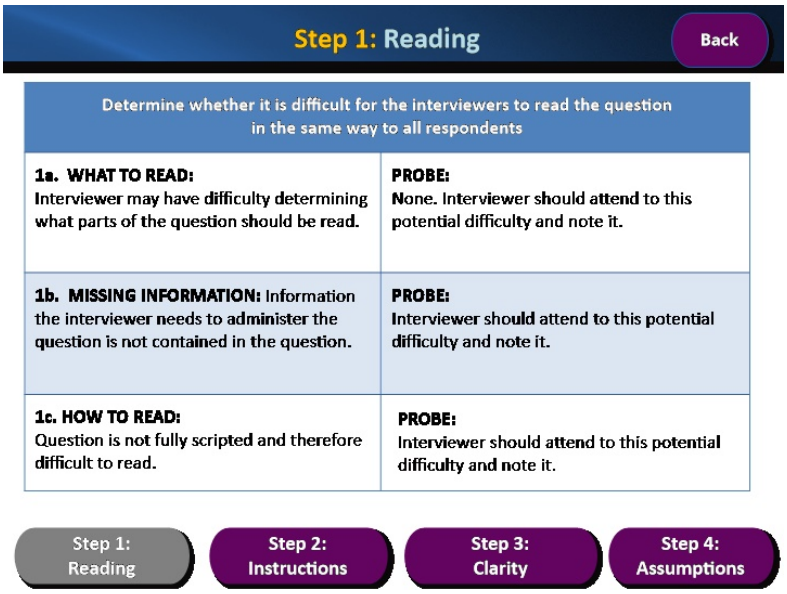
3.17 Interview Concerns II



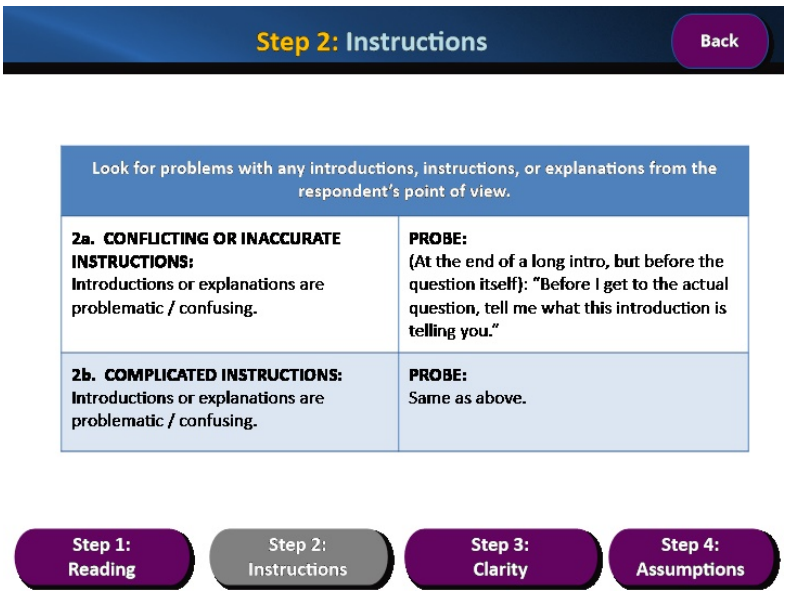
3.18 Probe Quality



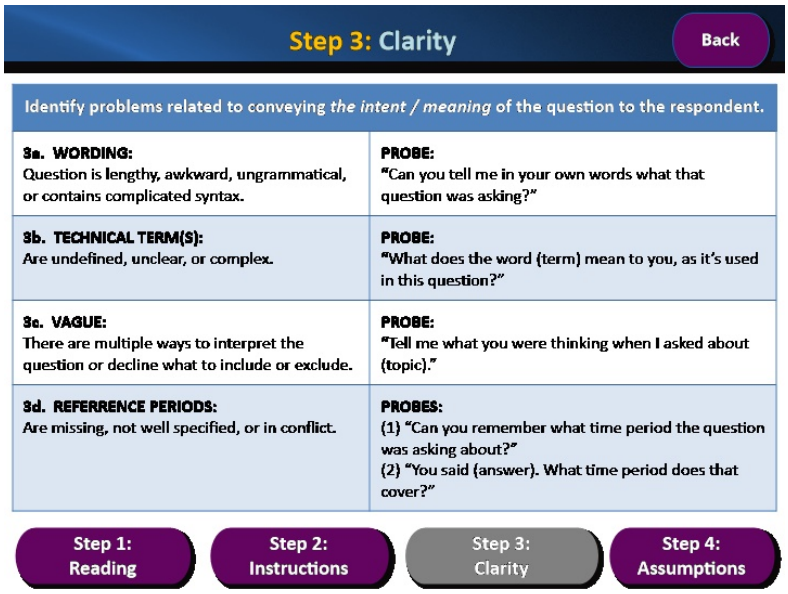
Step 1 (Slide Layer)



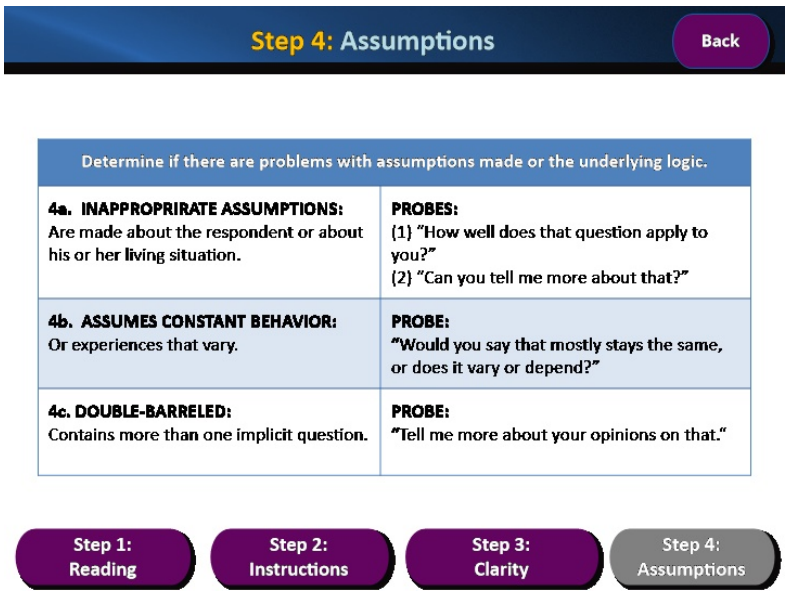
Step 2 (Slide Layer)



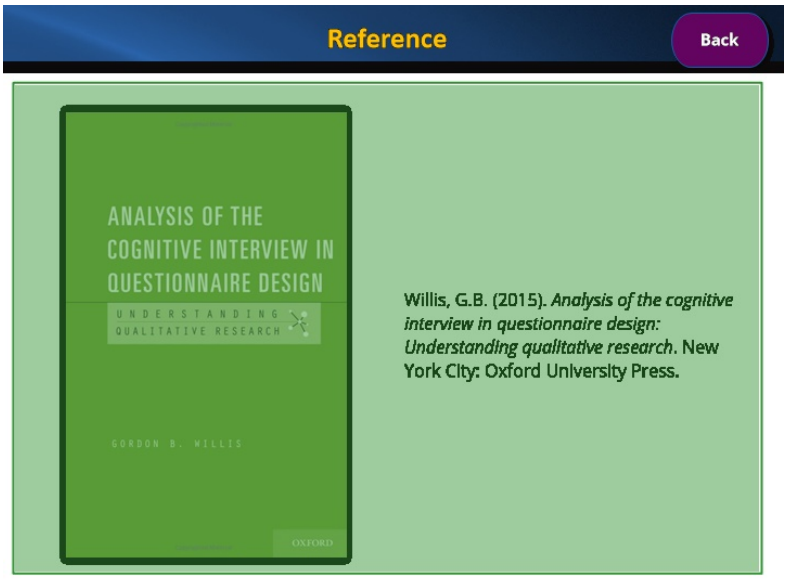
Step 3 (Slide Layer)



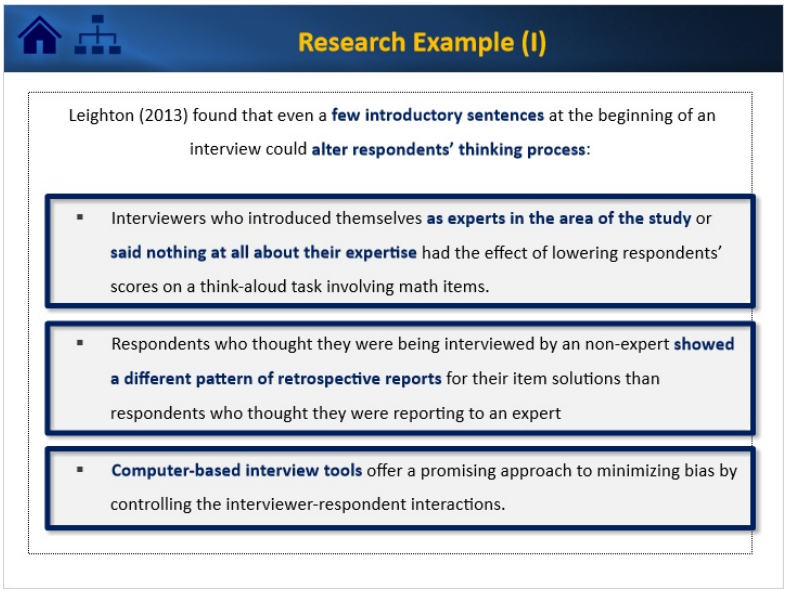
Step 4 (Slide Layer)



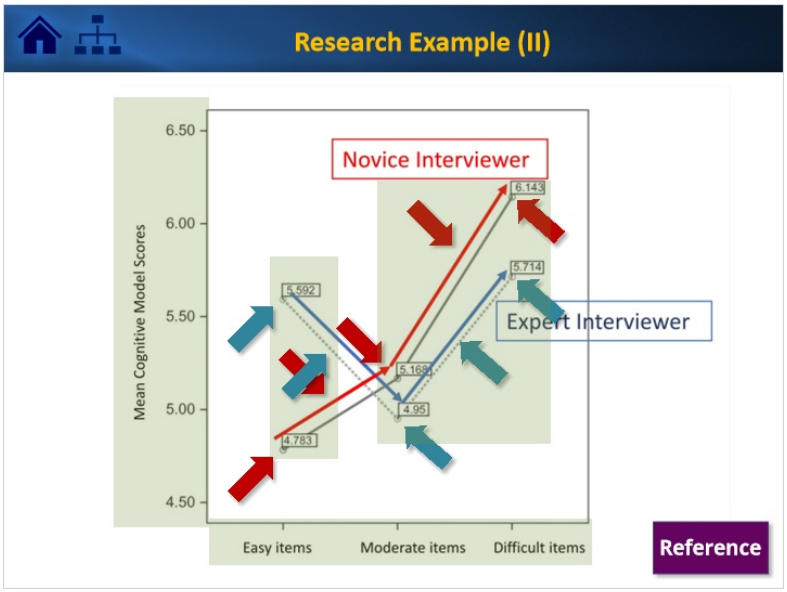
Reference (Slide Layer)



3.19 Example I

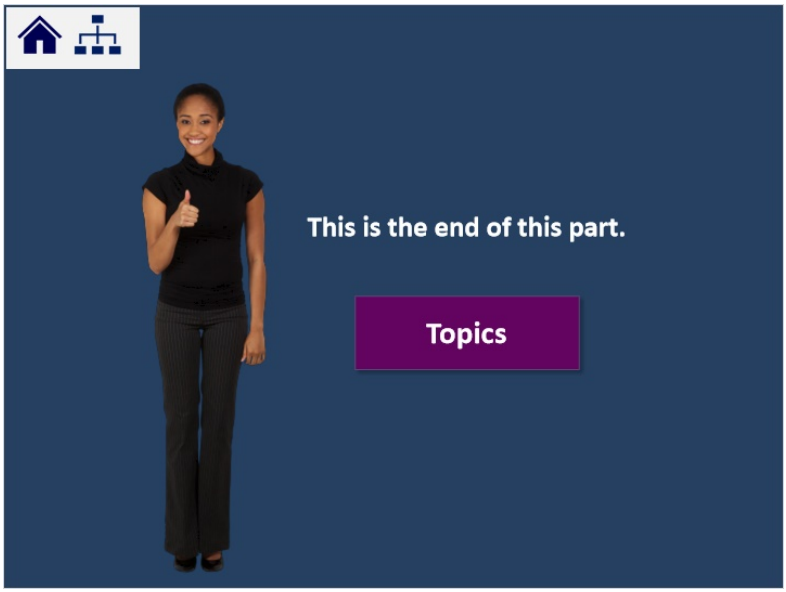


3.20 Example II



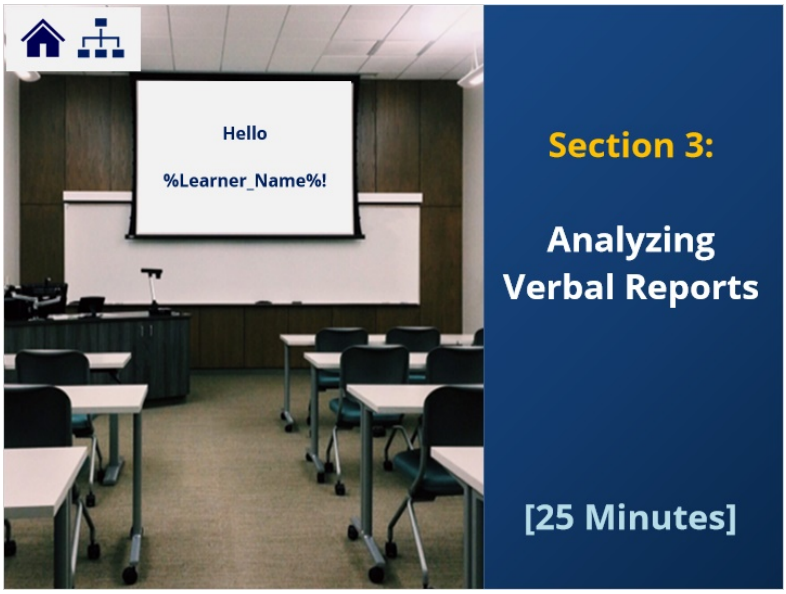
Reference (Slide Layer)

3.21 Bookend: Tradtional Methods

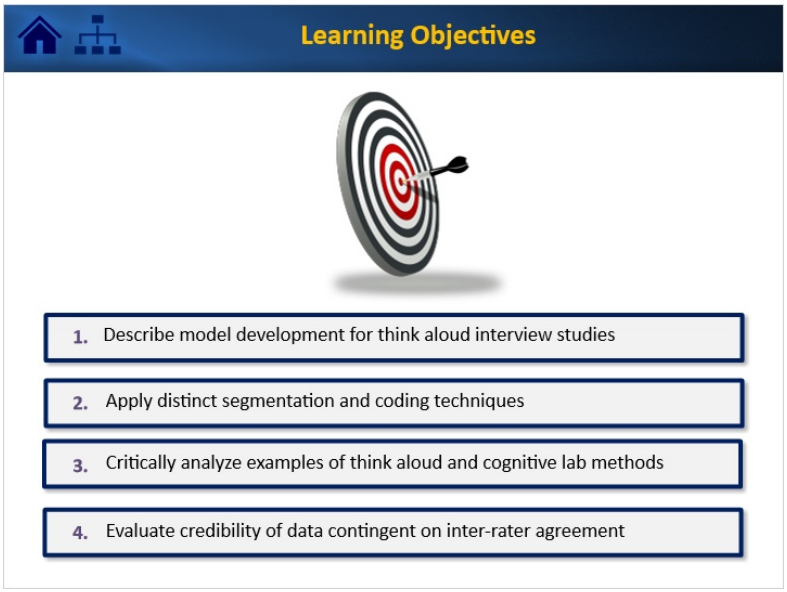


4. Section 3: Analyzing Verbal Reports

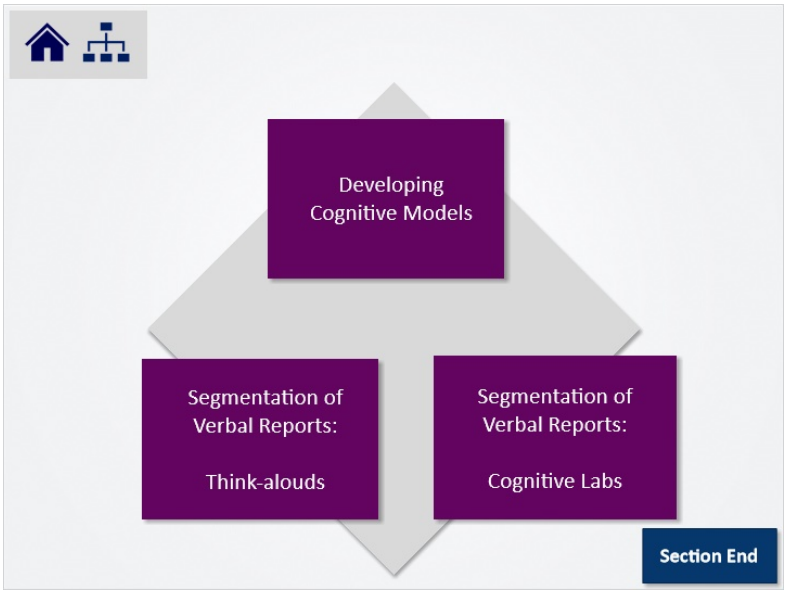
4.1 Cover: Section 3



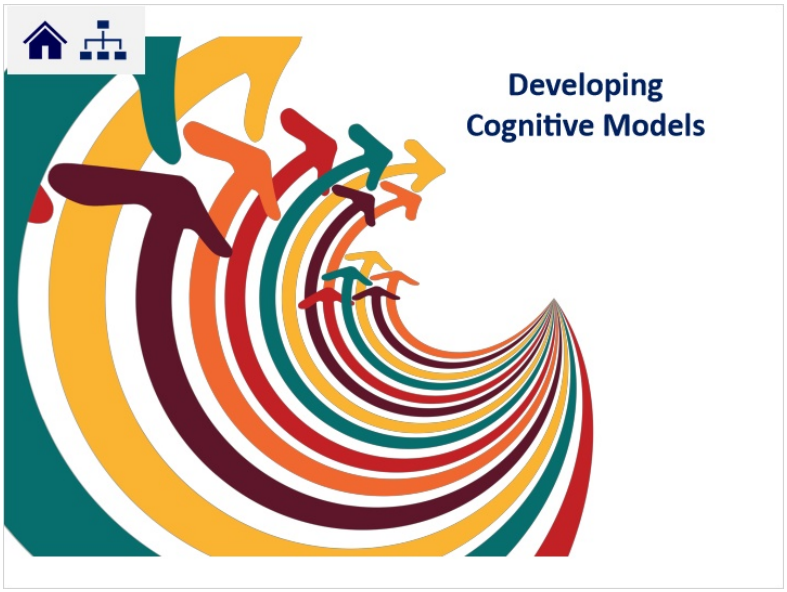
4.2 Objectives: Section 4



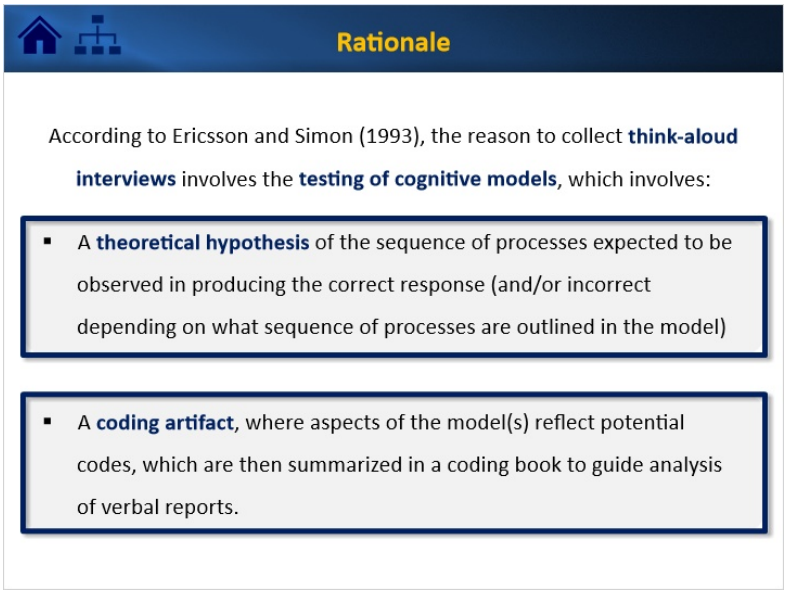
4.3 Topic Selection



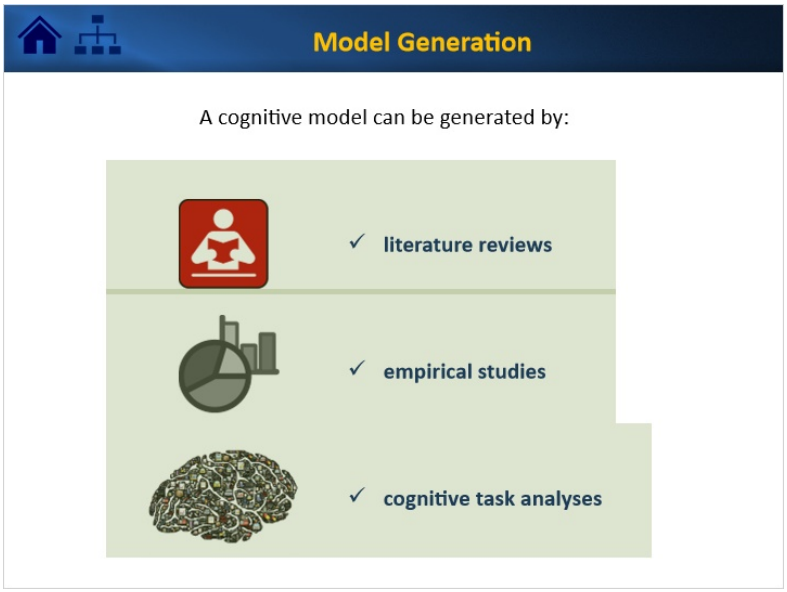
4.4 Bookmark: Model Development



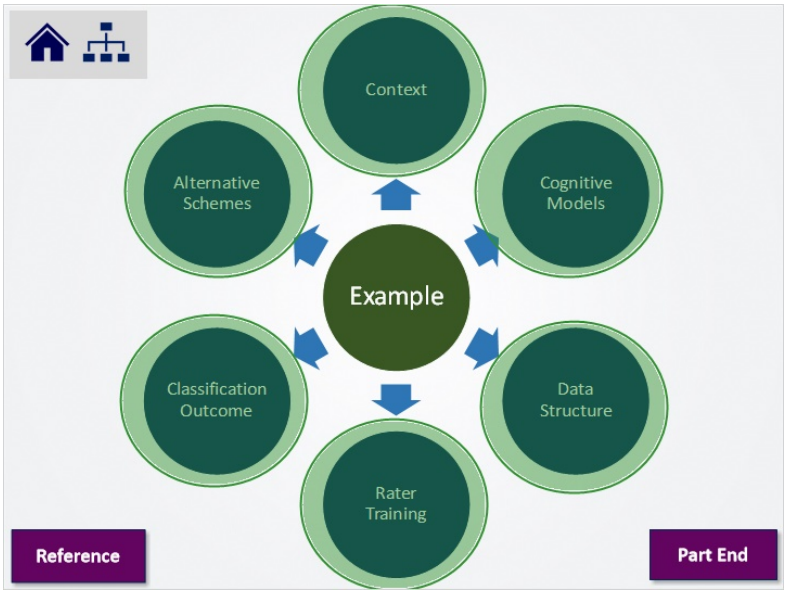
4.5 Cognitive Models vs Exploratory Model Generation I



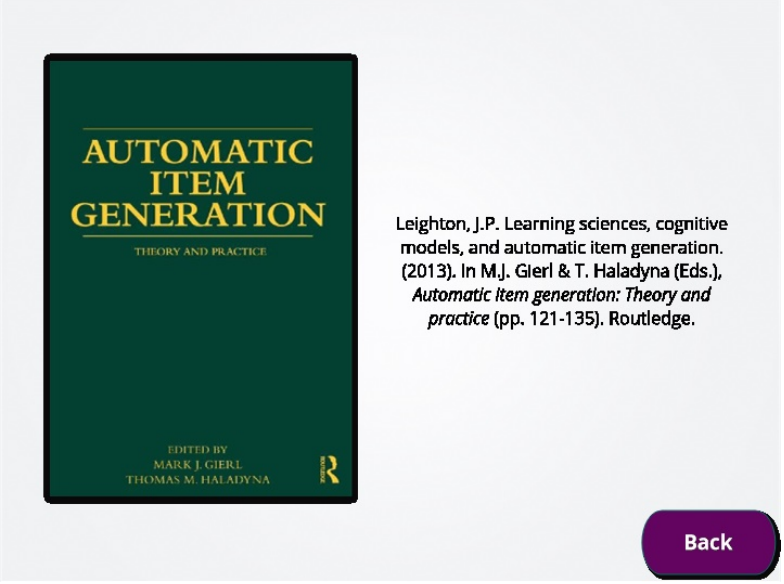
4.6 Model Generation II



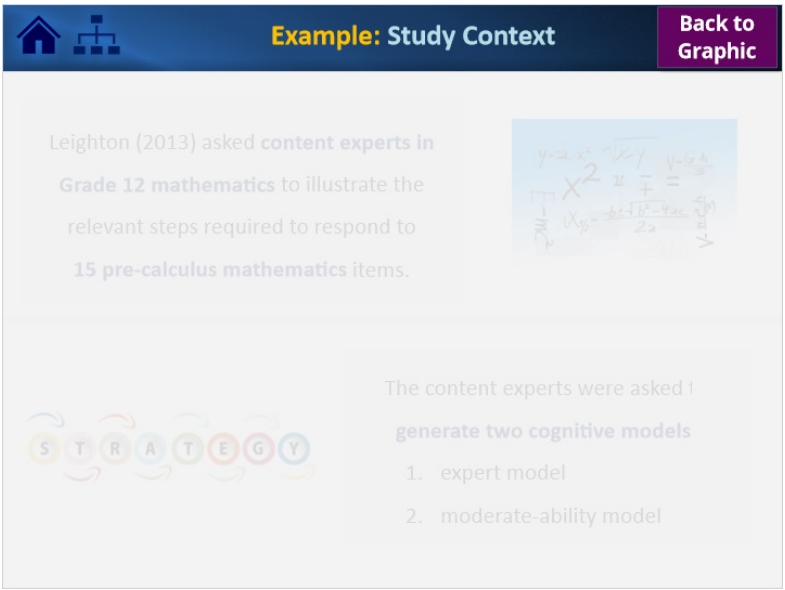
4.7 Example Part Selection



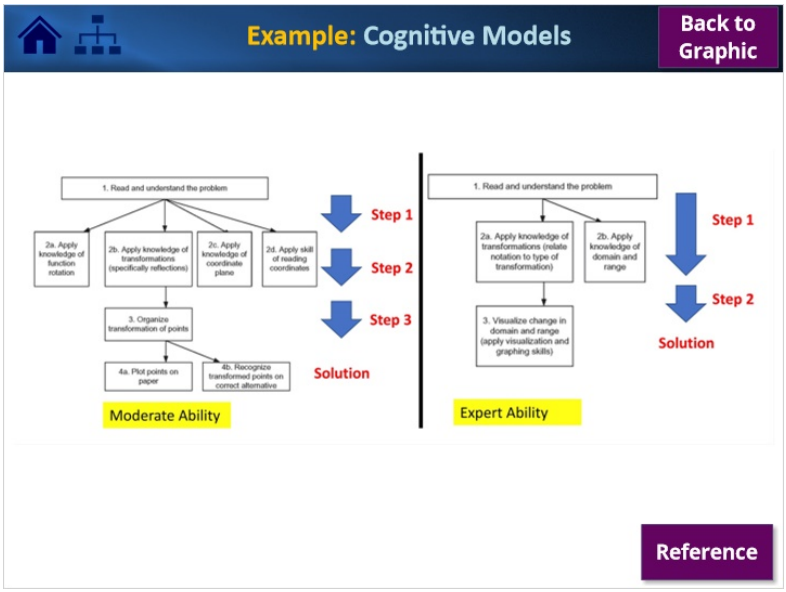
Reference (Slide Layer)



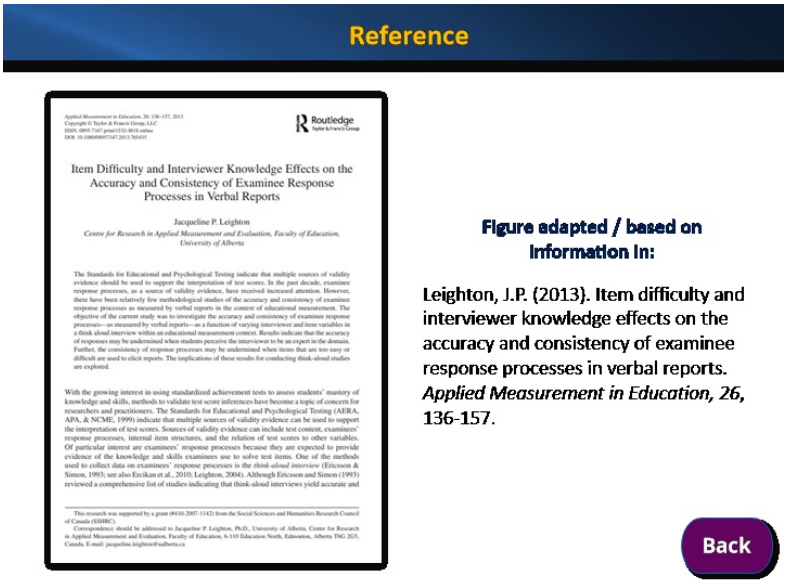
4.8 Example I



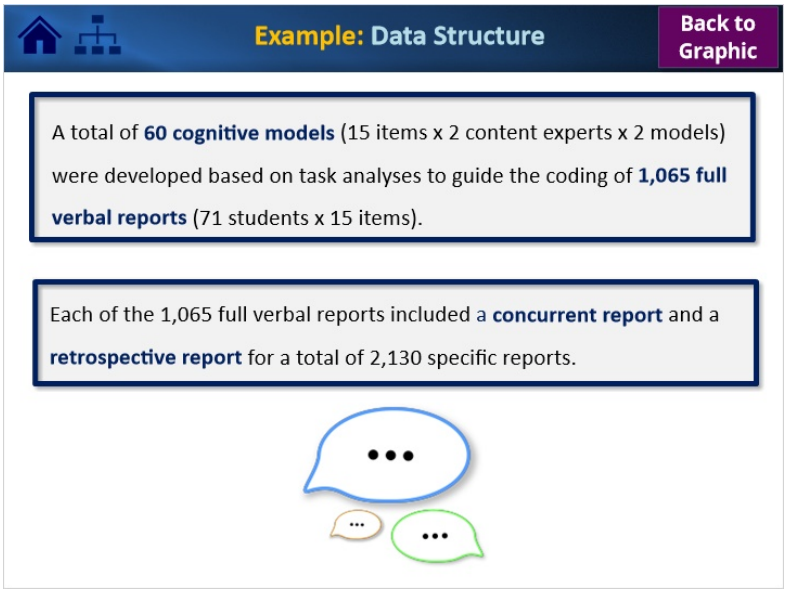
4.9 Example II



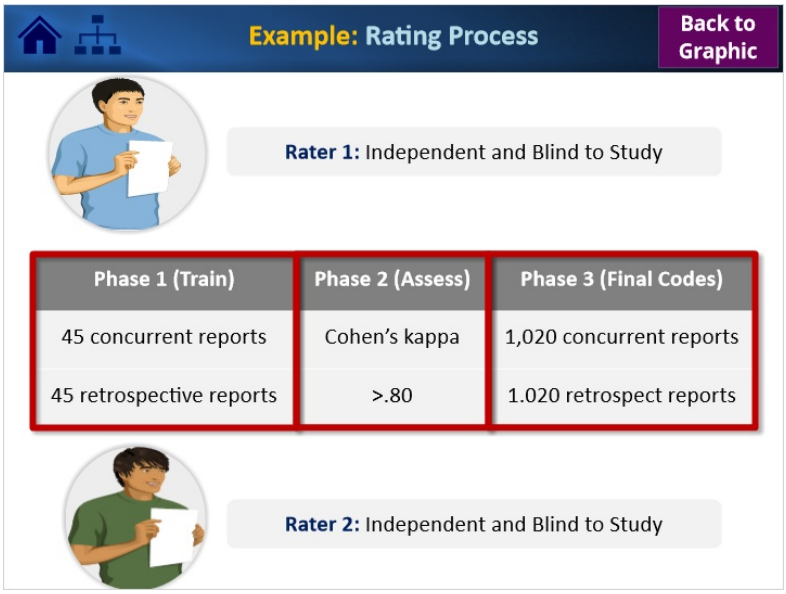
Reference (Slide Layer)



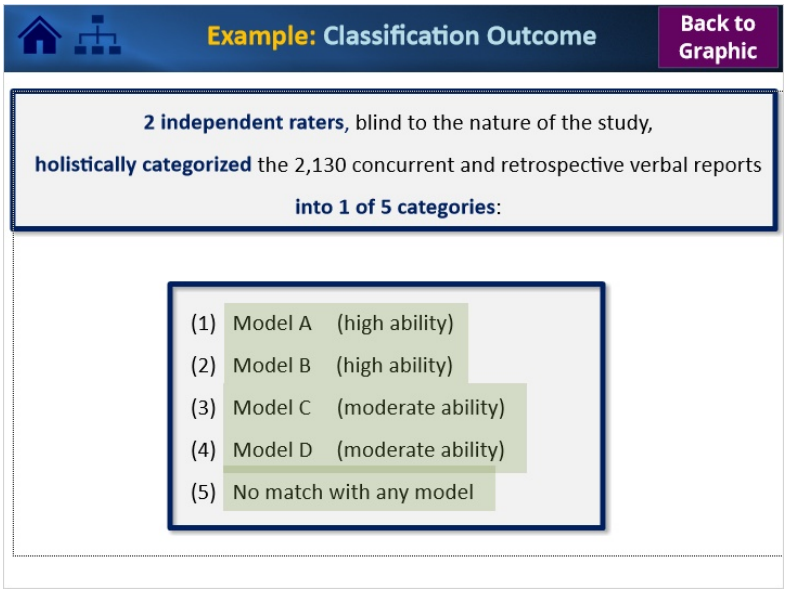
4.10 Example III



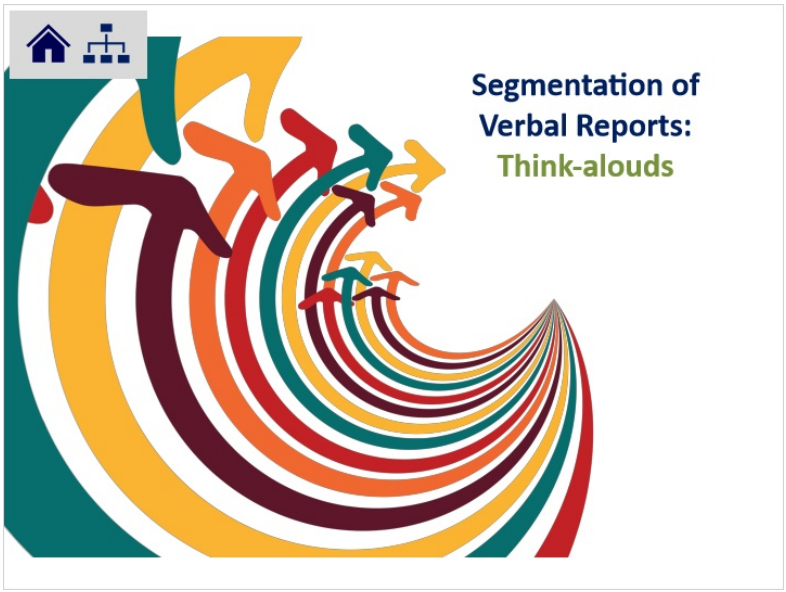
4.11 Example V



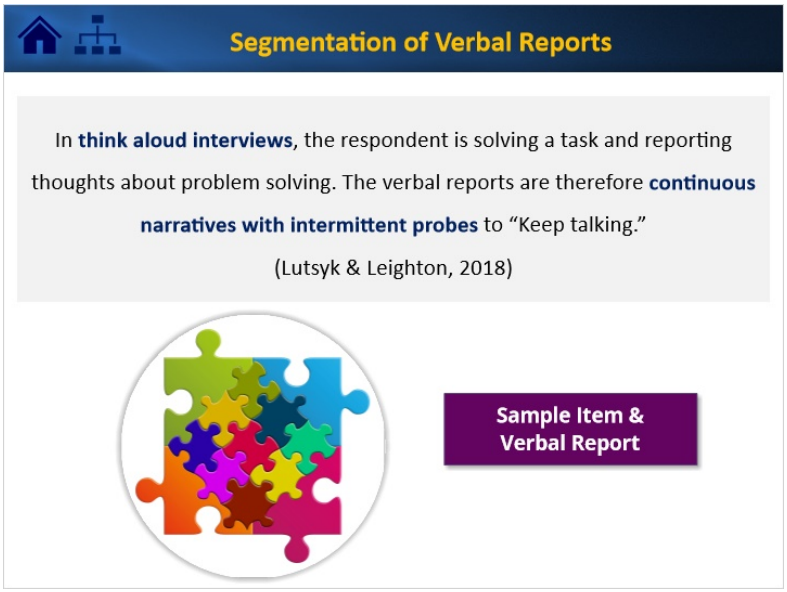
4.12 Example IV



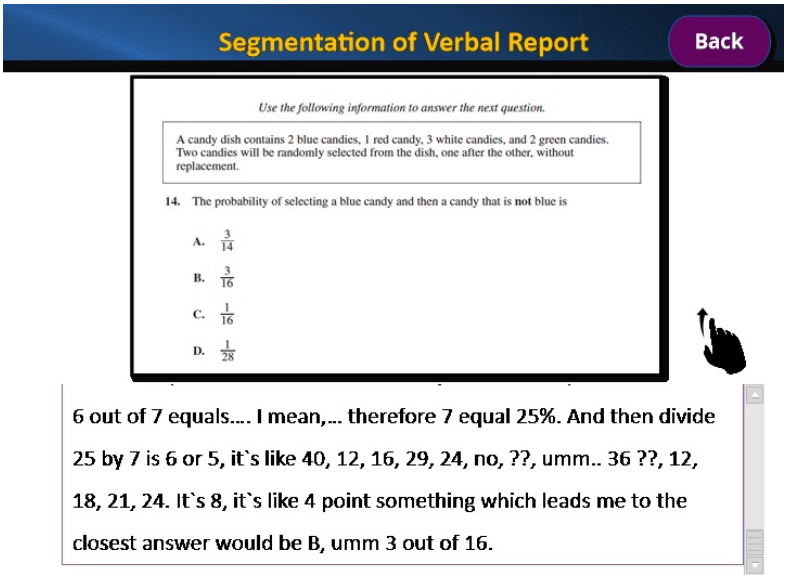
4.13 Bookmark: Segmentation for Think-alouds



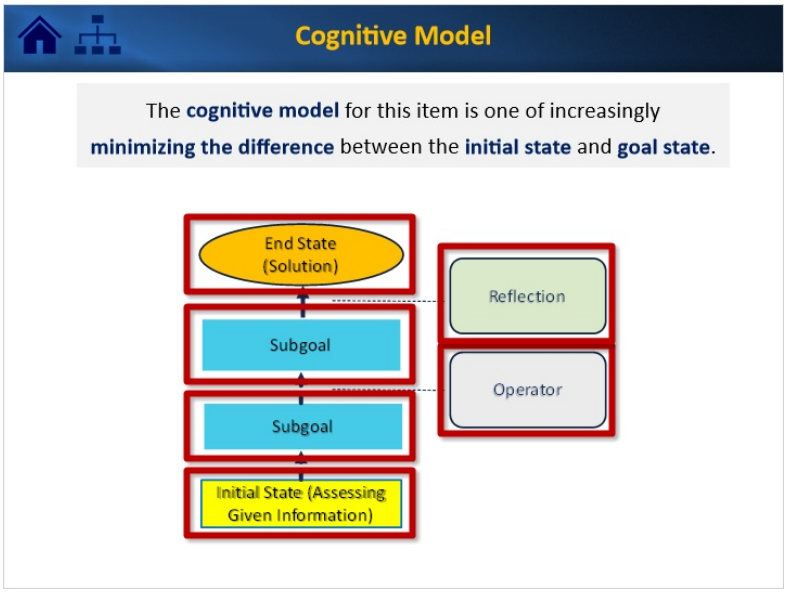
4.14 Segmentation of Verbal Report



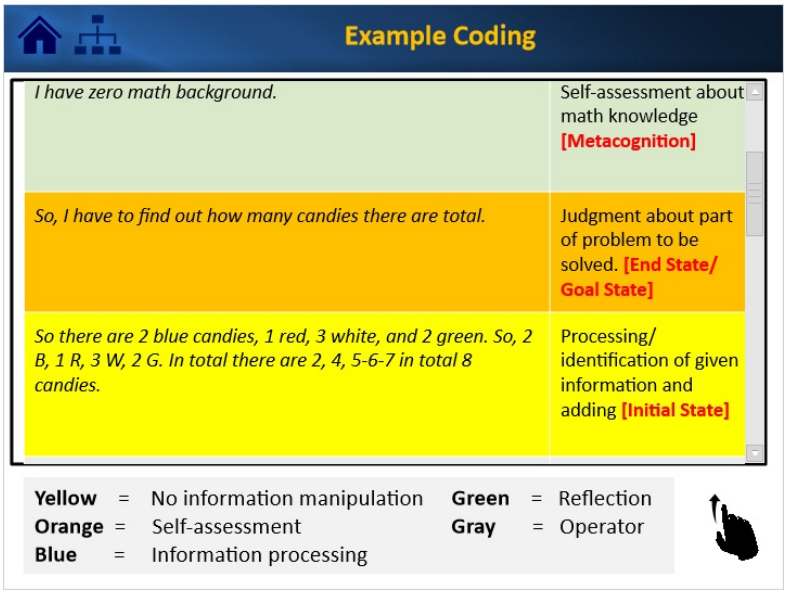
Example (Slide Layer)



4.15 Segmentation of Verbal Report

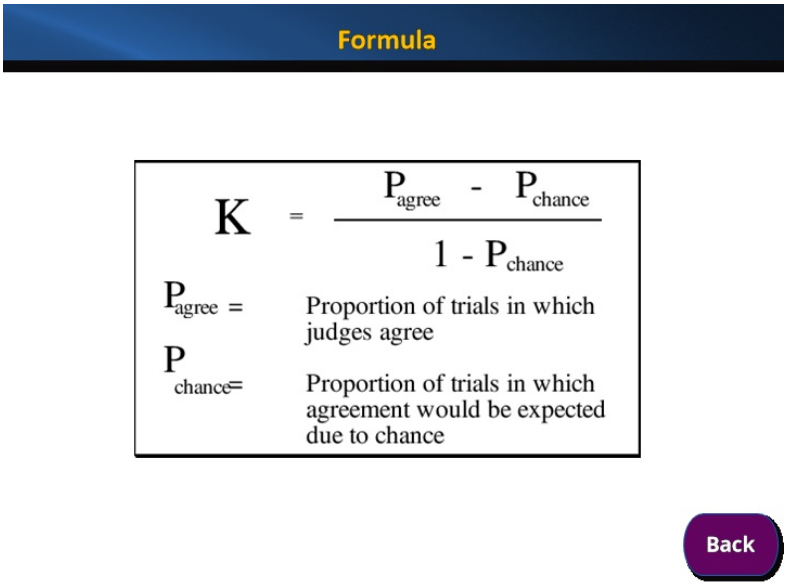


4.16 Example

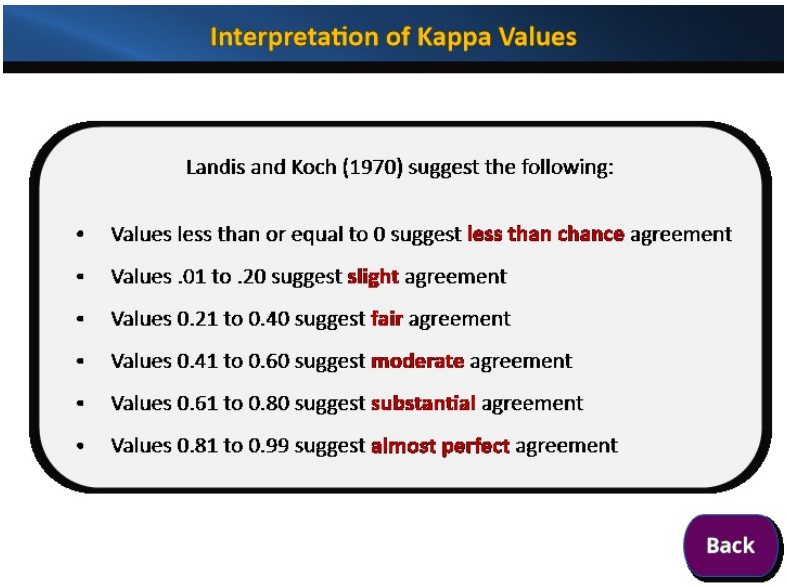


4.17 Inter-rater Agreement and Credibility of Inferences

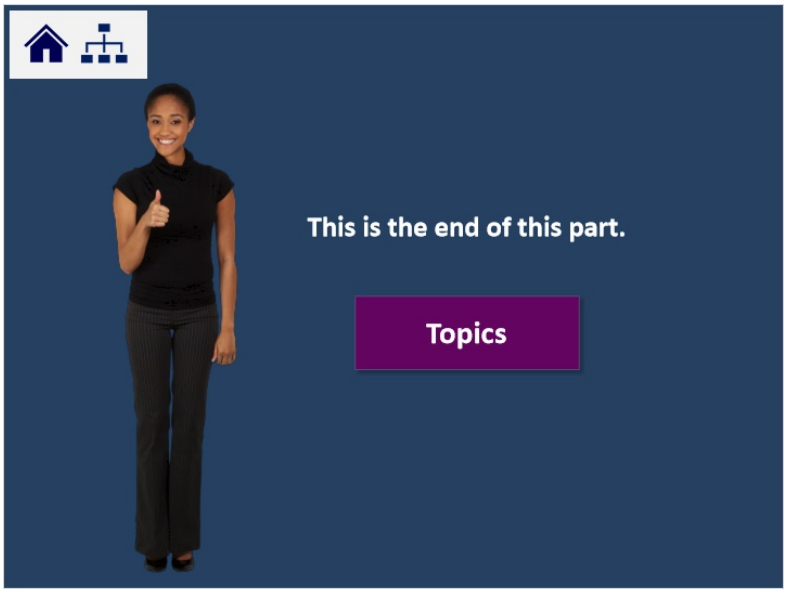
formula (Slide Layer)



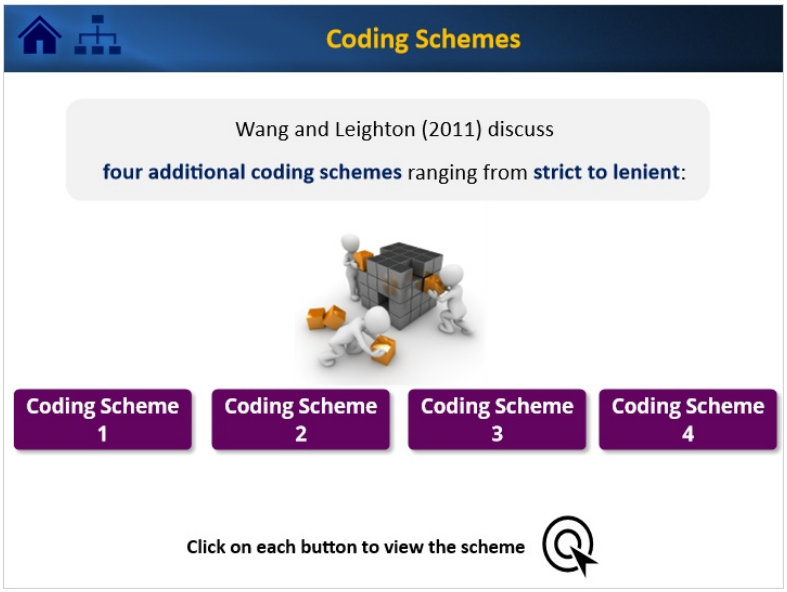
Thresholds (Slide Layer)



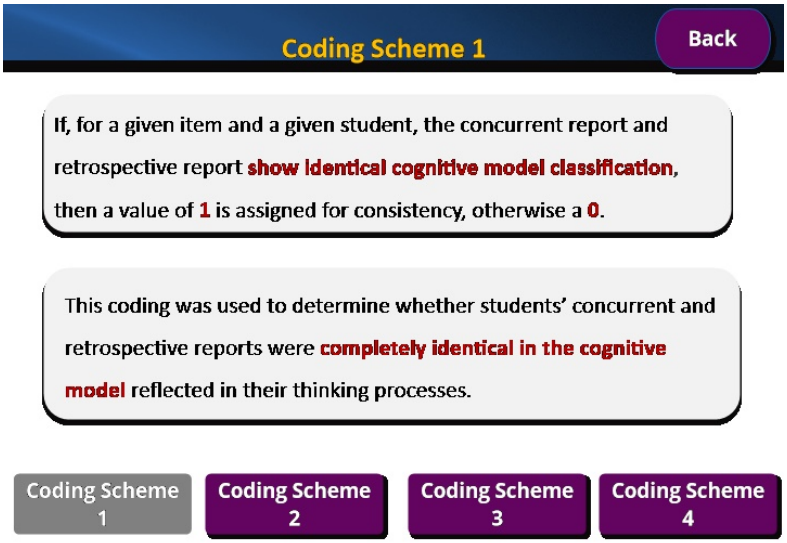
4.18 Bookend: Segmentation for Think-alouds



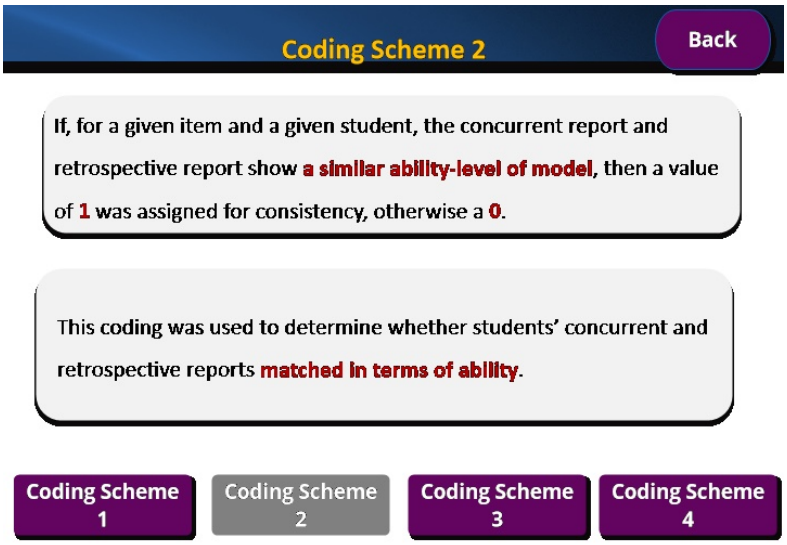
4.19 Coding Schemes



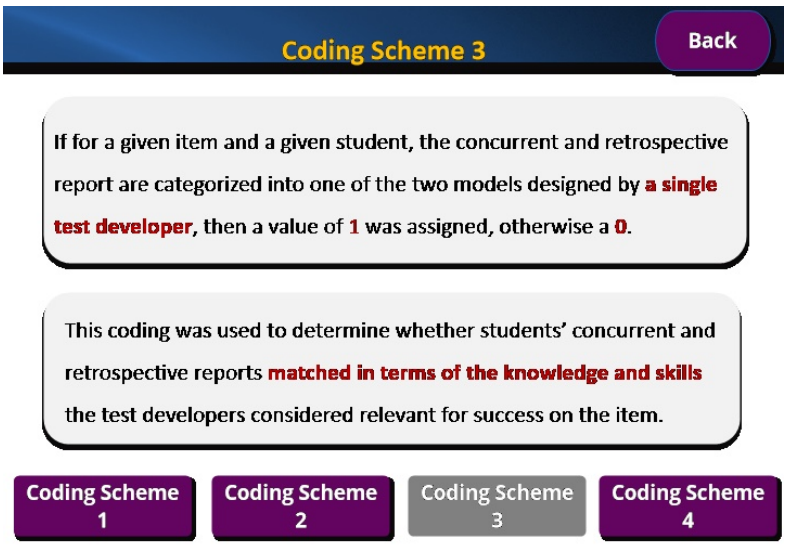
Scheme 1 (Slide Layer)



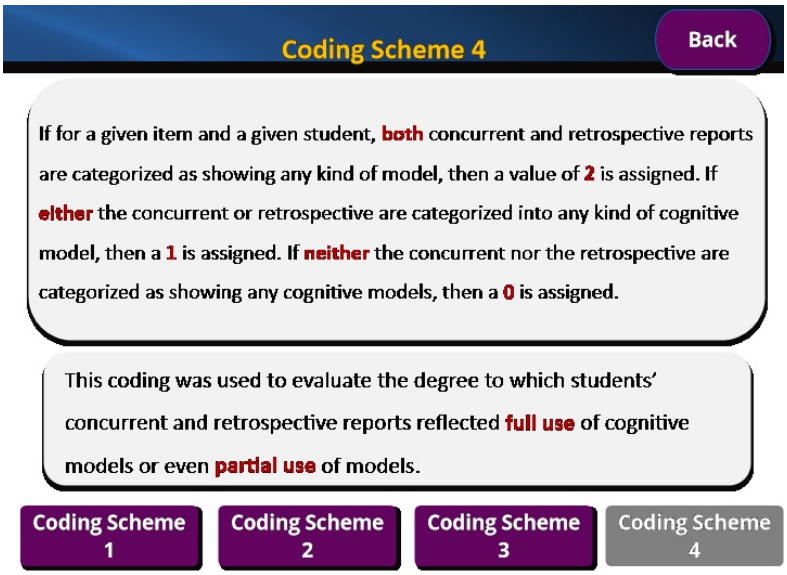
Scheme 2 (Slide Layer)



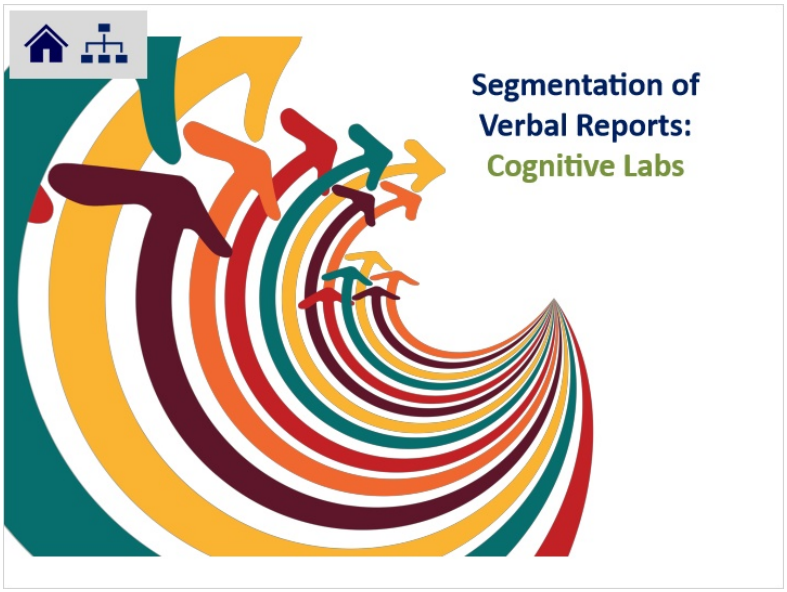
Scheme 3 (Slide Layer)



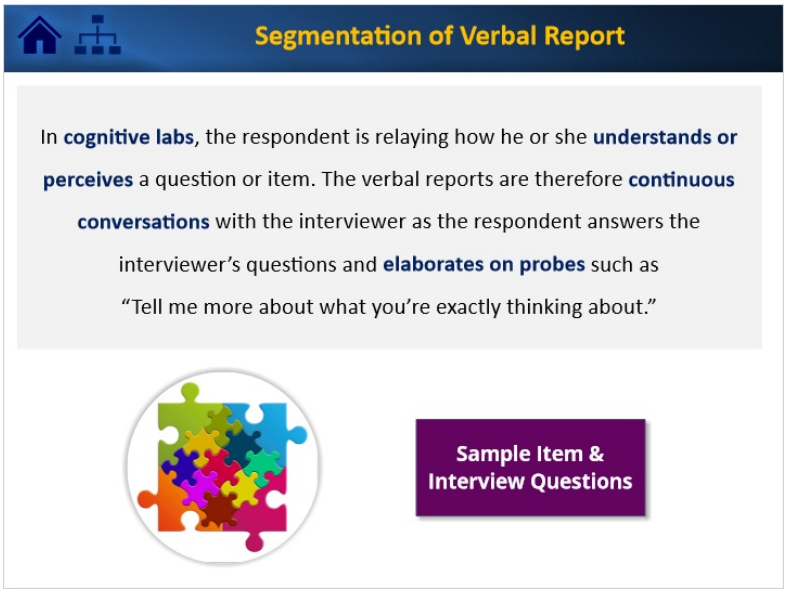
Scheme 4 (Slide Layer)



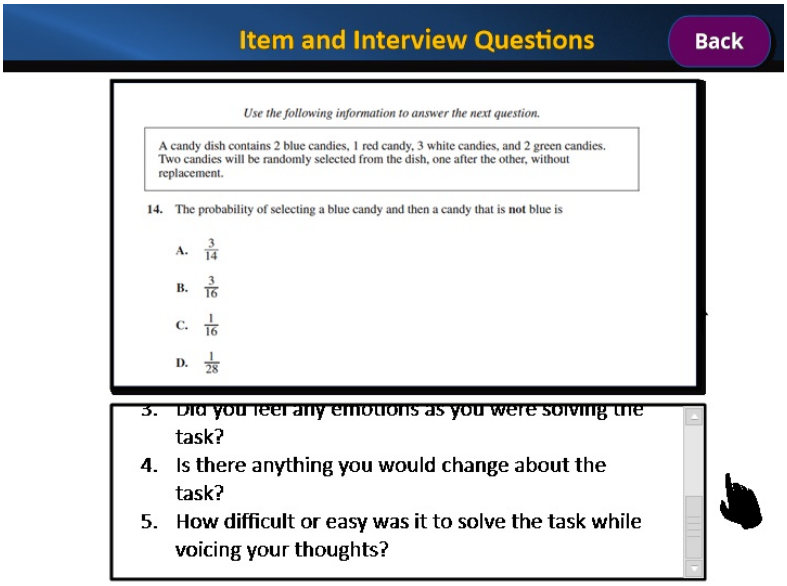
4.20 Bookmark: Segementation for Cog Labs



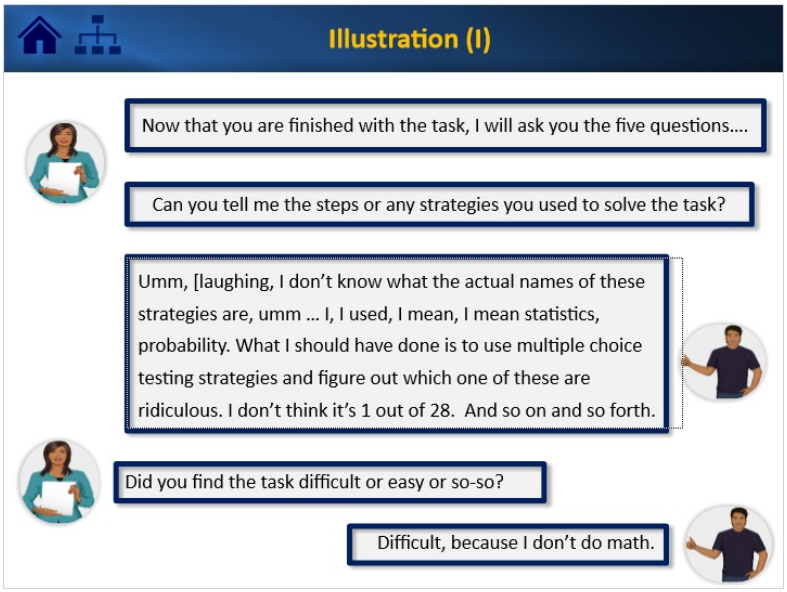
4.21 Example



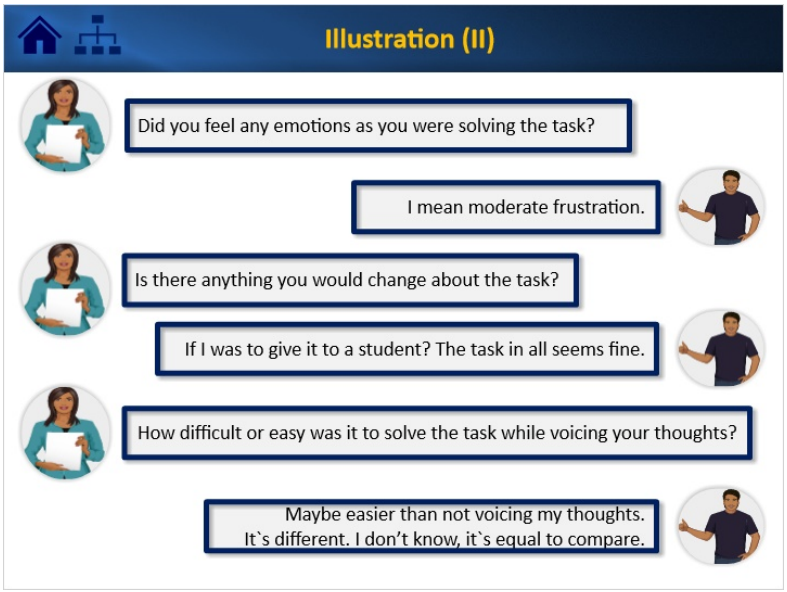
Example Item and Interview Questions (Slide Layer)



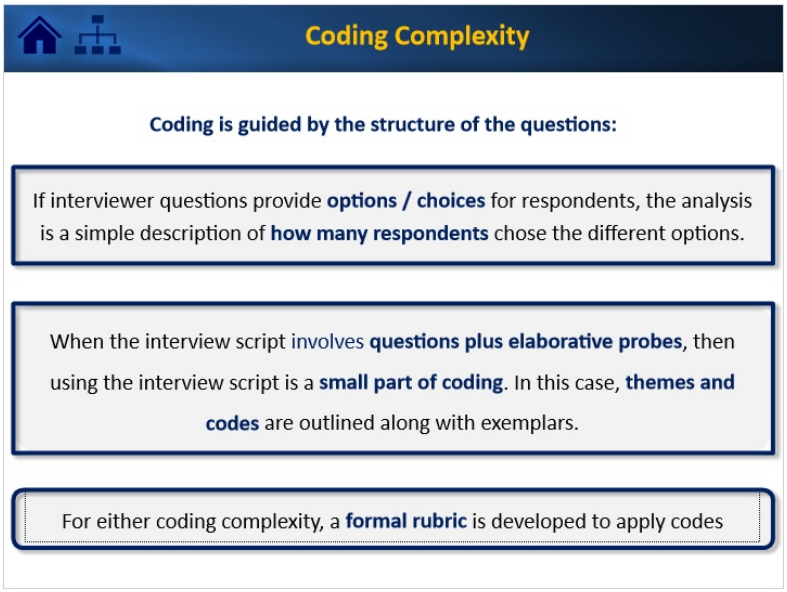
4.22 Illustration I



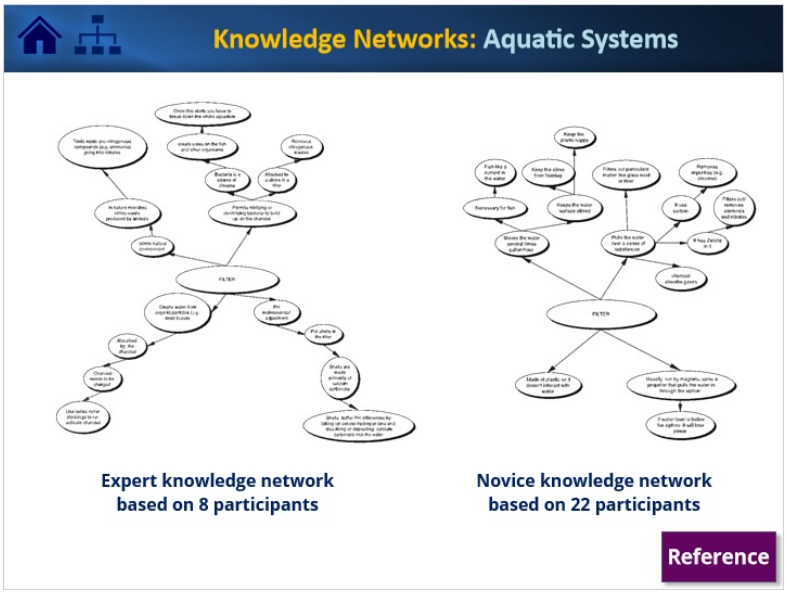
4.23 Illustration II



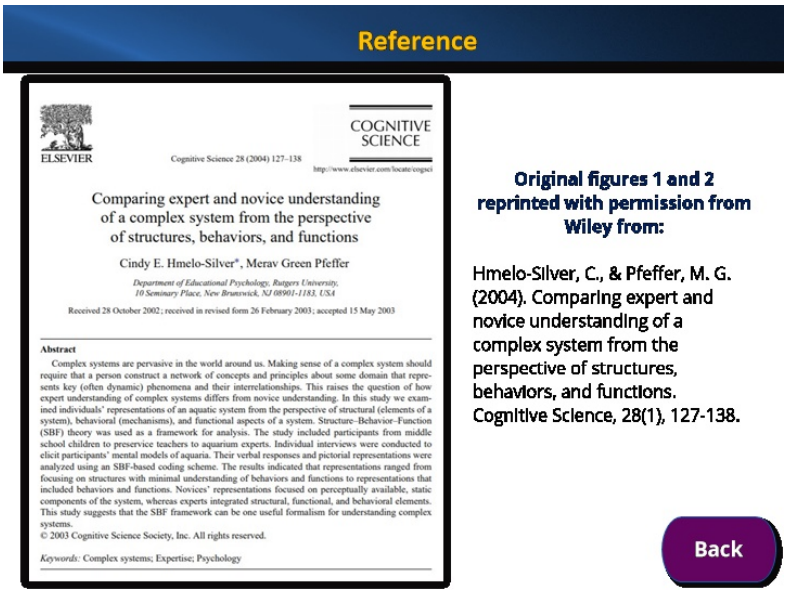
4.24 Coding Complexity



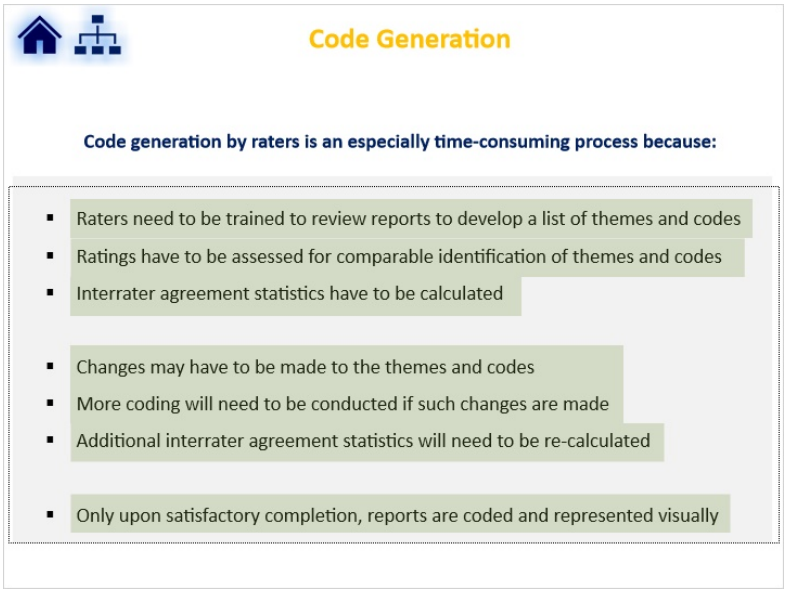
4.25 Knowledge Networks



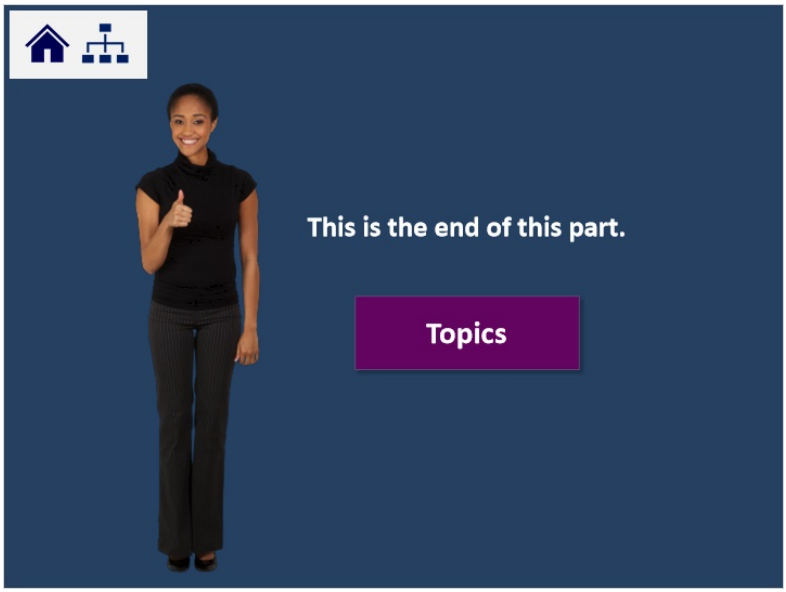
Reference (Slide Layer)



4.26 Code Generation

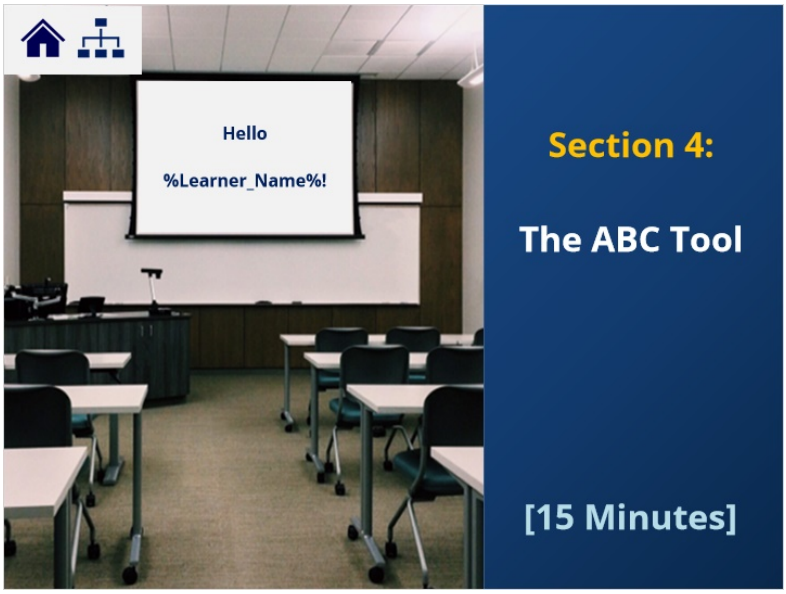


4.27 Bookend:Segmentation for Cog Labs

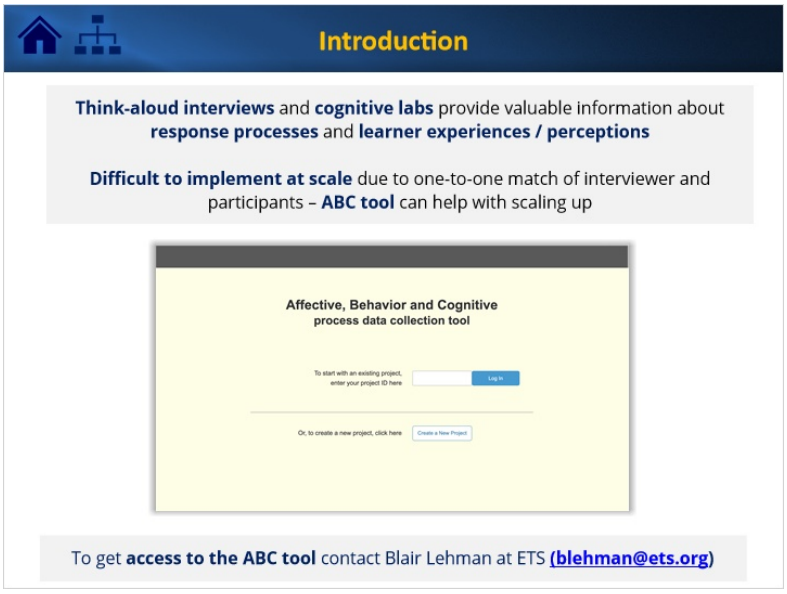


5. Section 4: ABC Tool

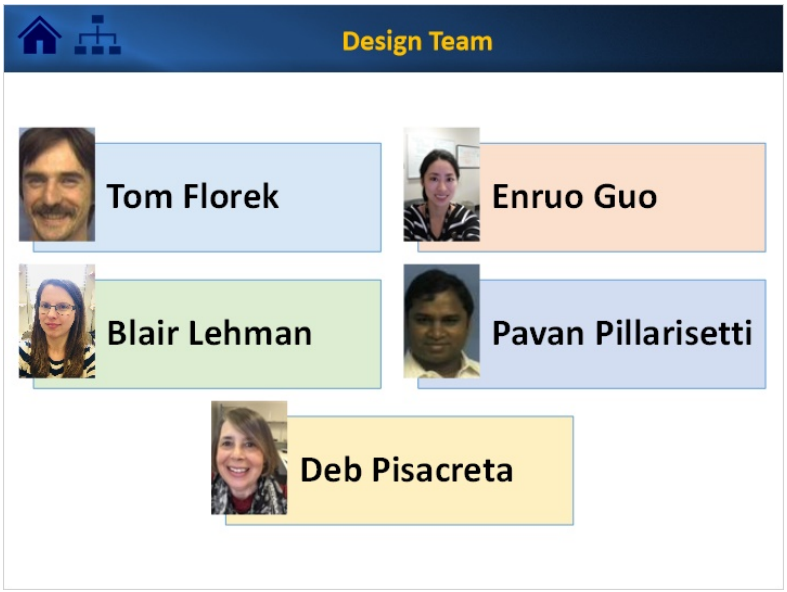
5.1 Cover: Section 4



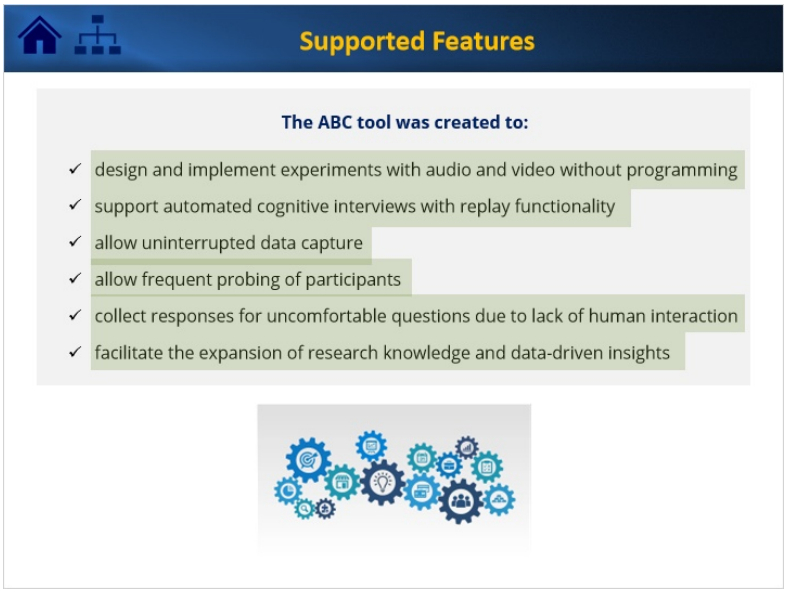
5.2 Overview



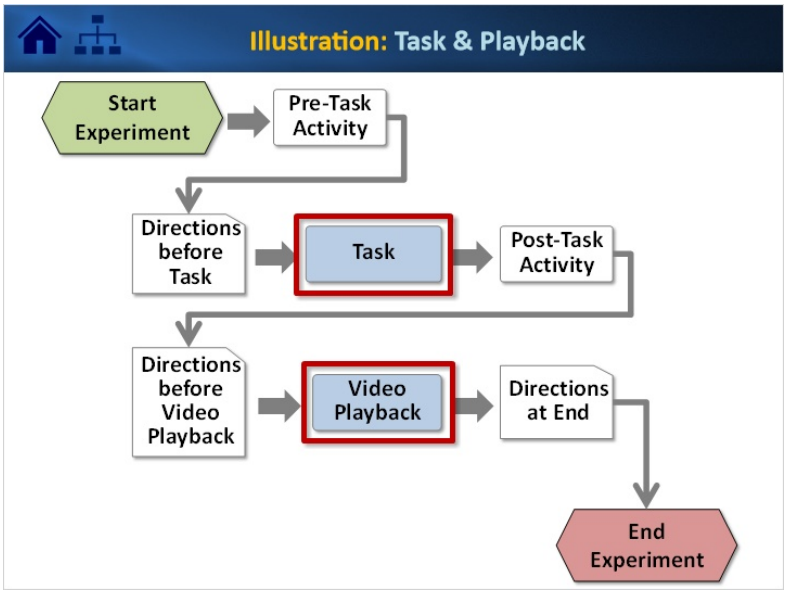
5.3 Team



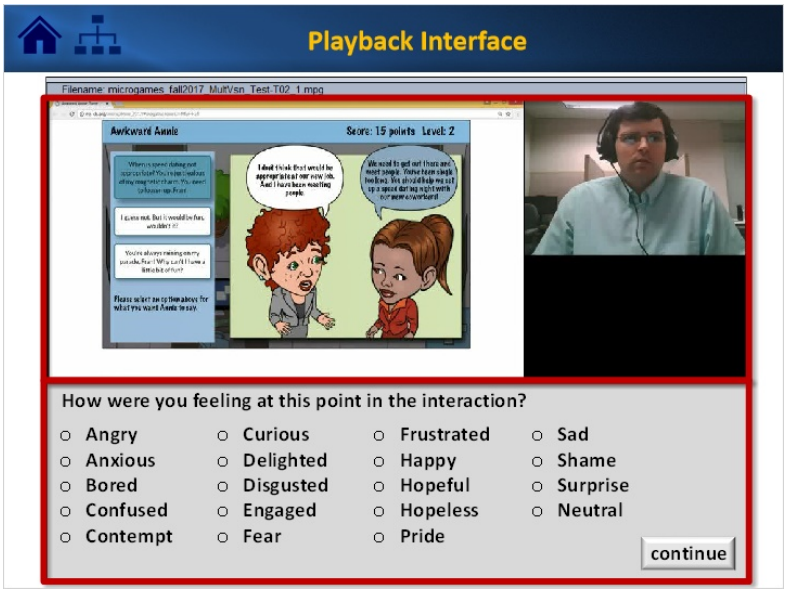
5.4 Supported Features



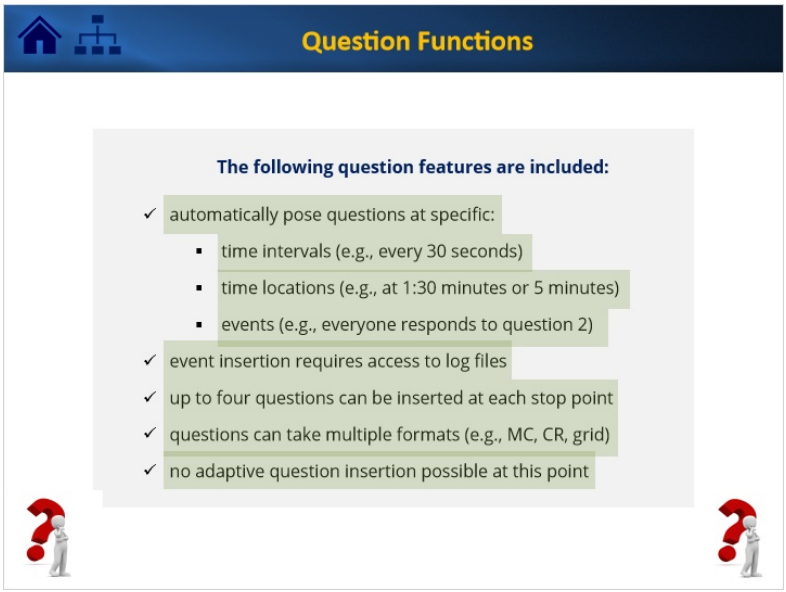
5.5 Experimental Design (I)



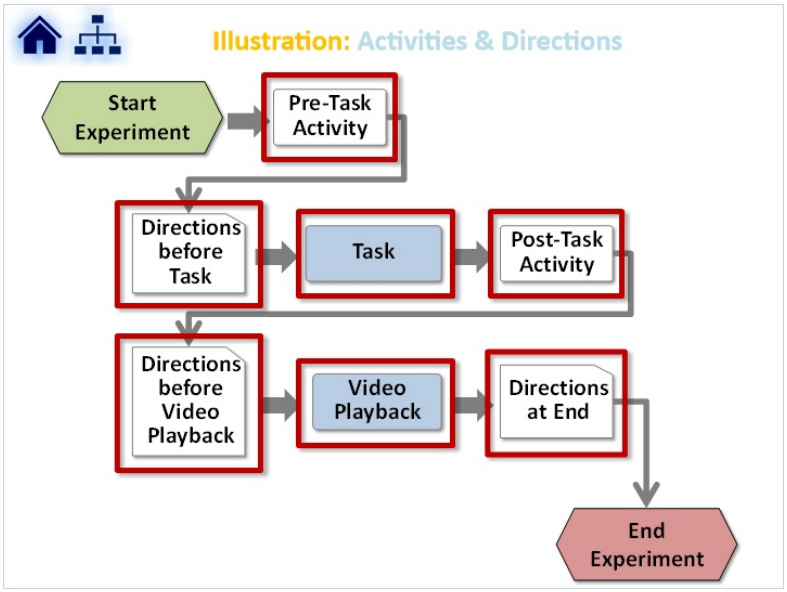
5.6 Playback Interface



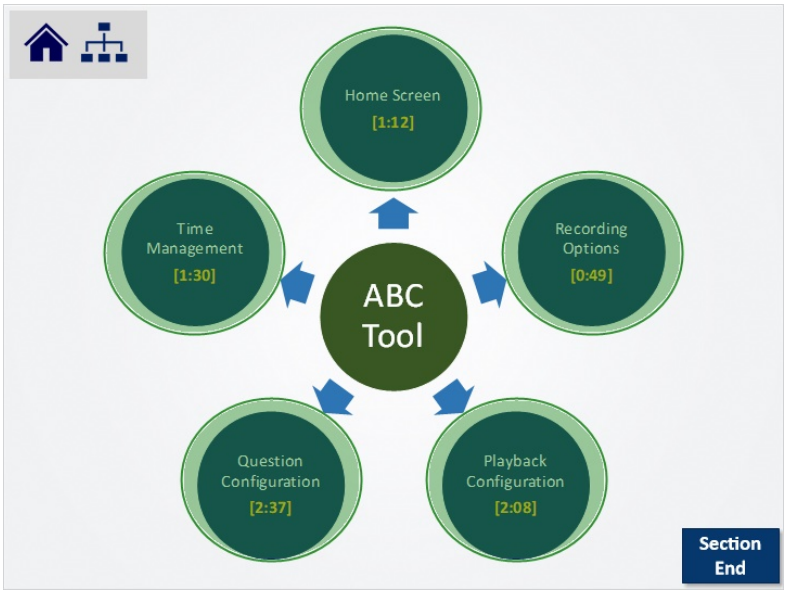
5.7 Question Functions



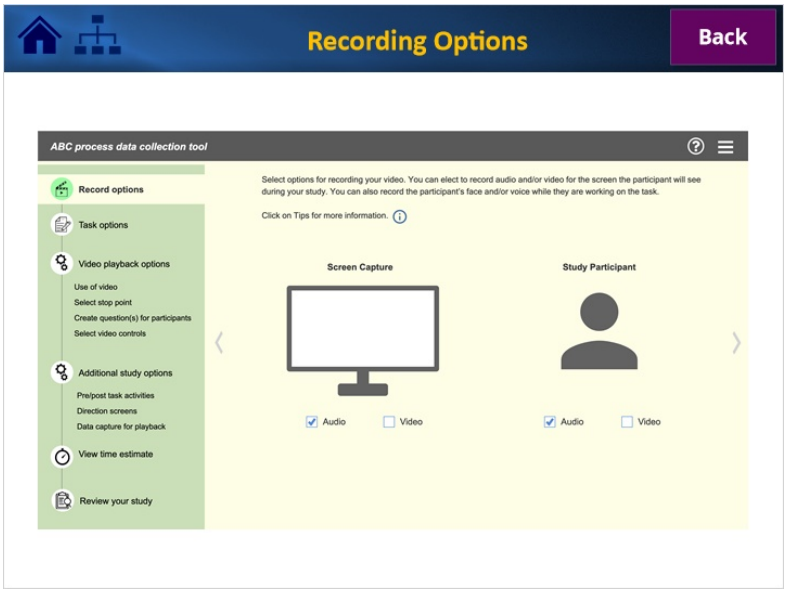
5.8 Experimental Design (II)



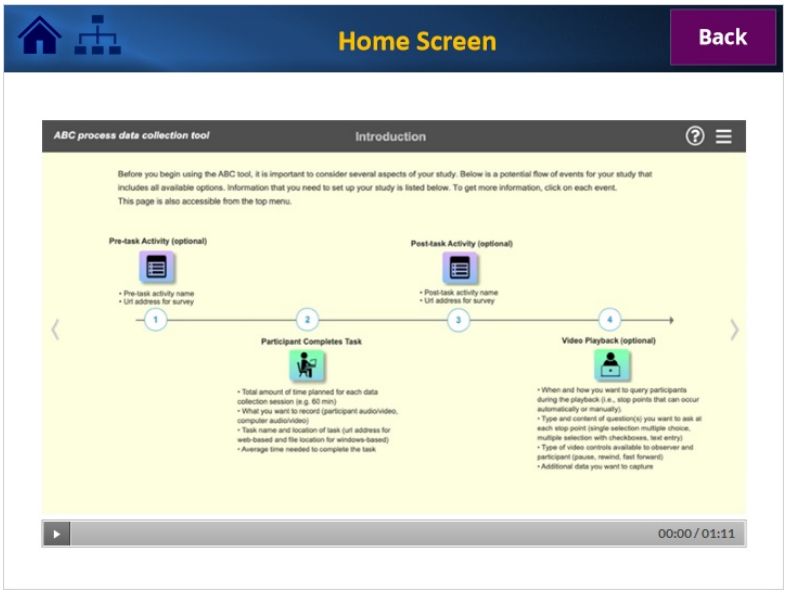
5.9 Tool Feature Selection



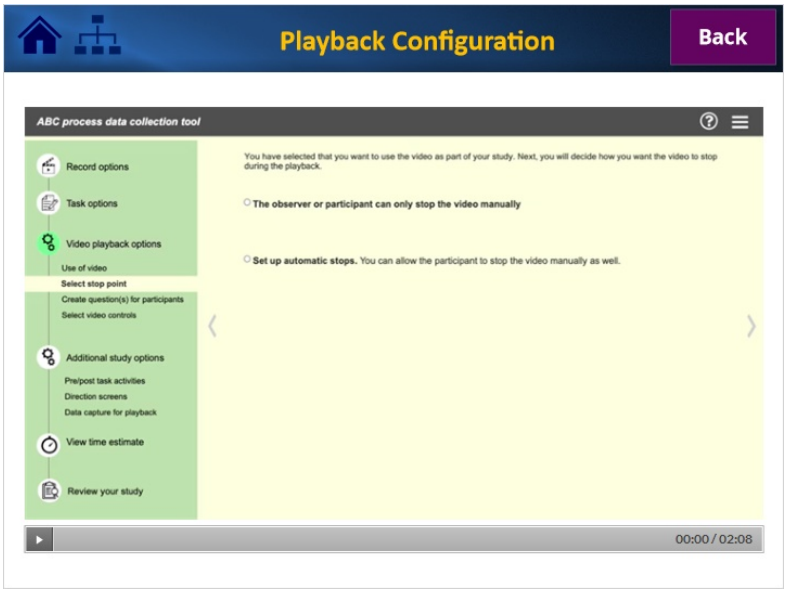
5.10 Recording Options



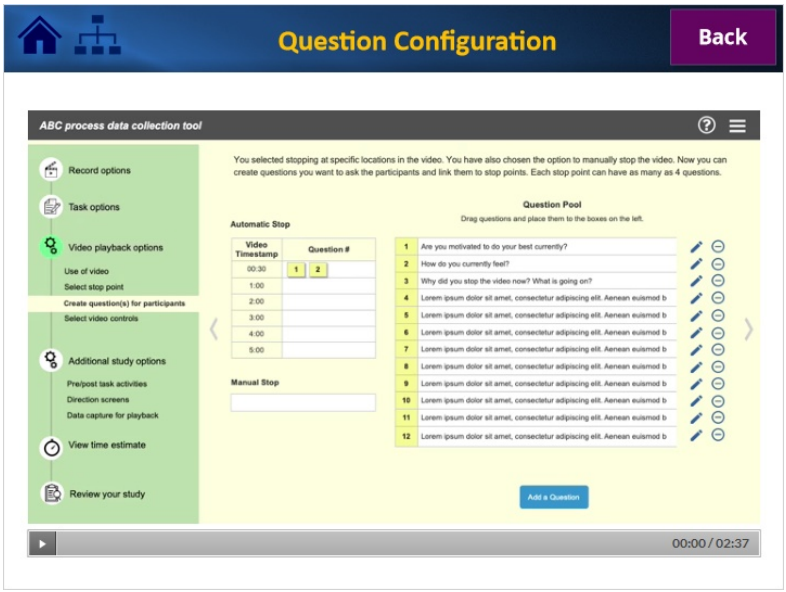
5.11 Main Screen



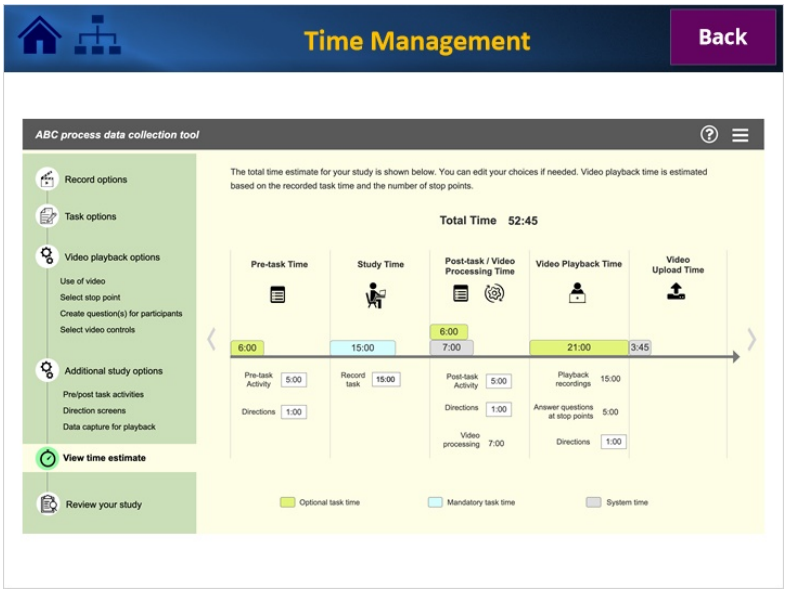
5.12 Playback Configuration



5.13 Question Configuration

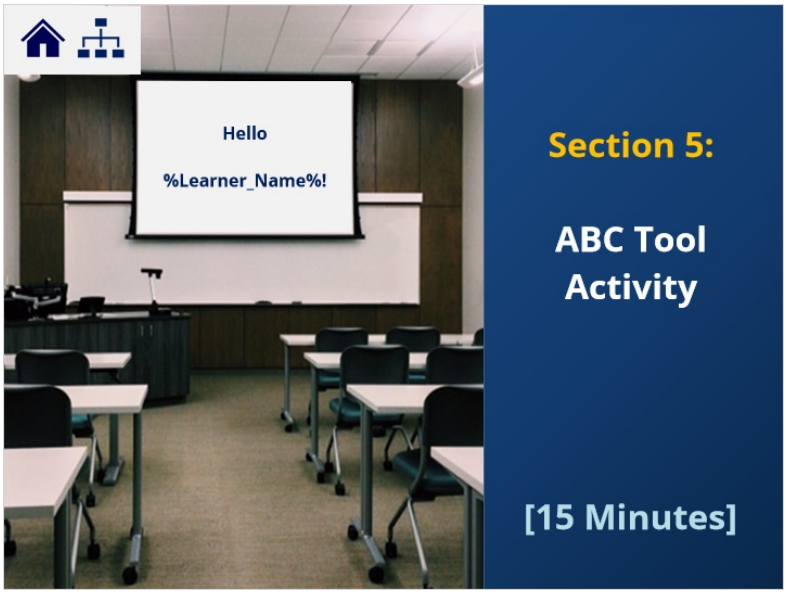


5.14 Time Management



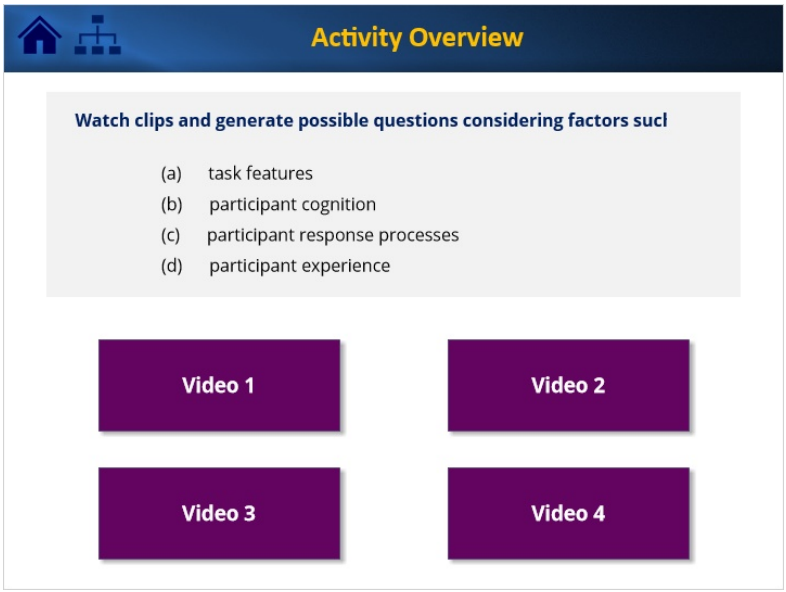
6. Section 5: ABC Tool Activity

6.1 Cover: Section 5

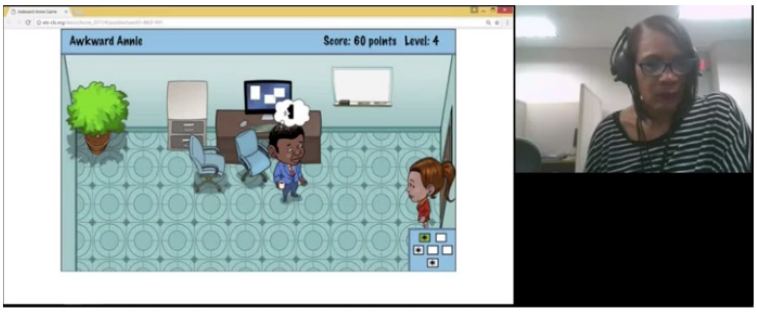


6.2 Activity Overview

6.3 Activity Overview

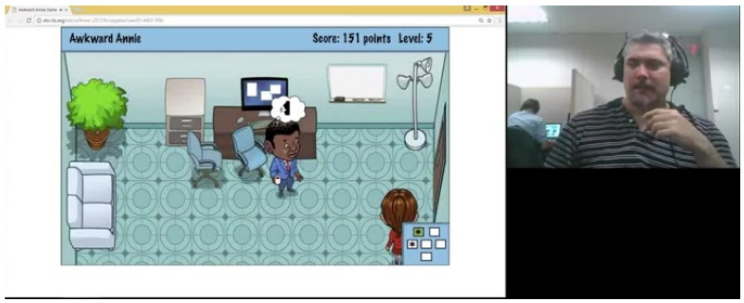


Video 1 (Slide Layer)



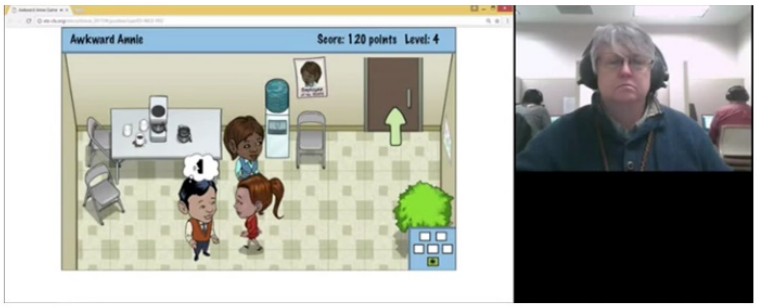
Click on the video, which will open in a new browser window

Video 2 (Slide Layer)



Click on the video, which will open in a new browser window

Video 3 (Slide Layer)



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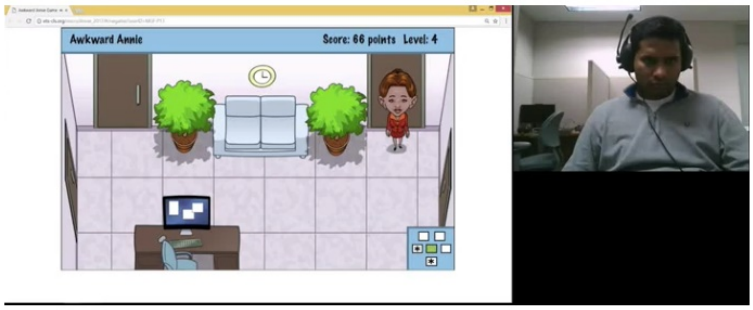
Video 4 (Slide Layer)



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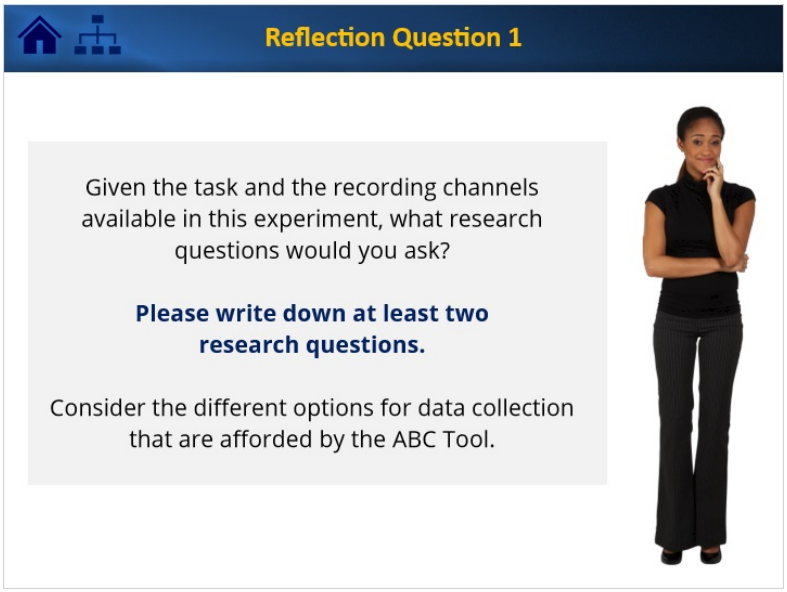
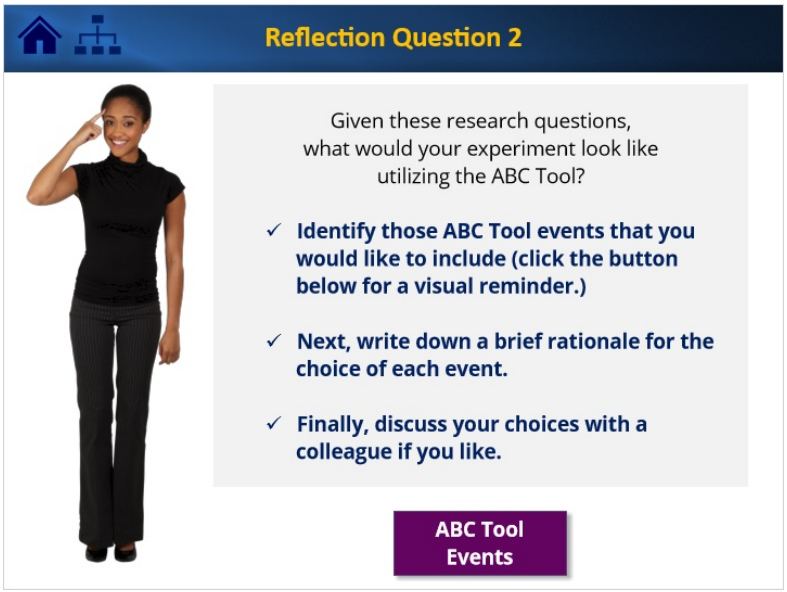
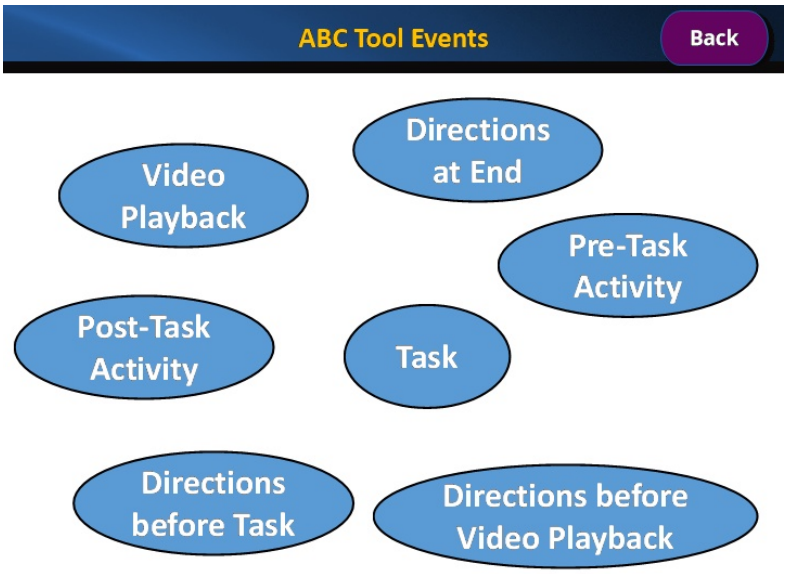
6.4 Reflection Question 1



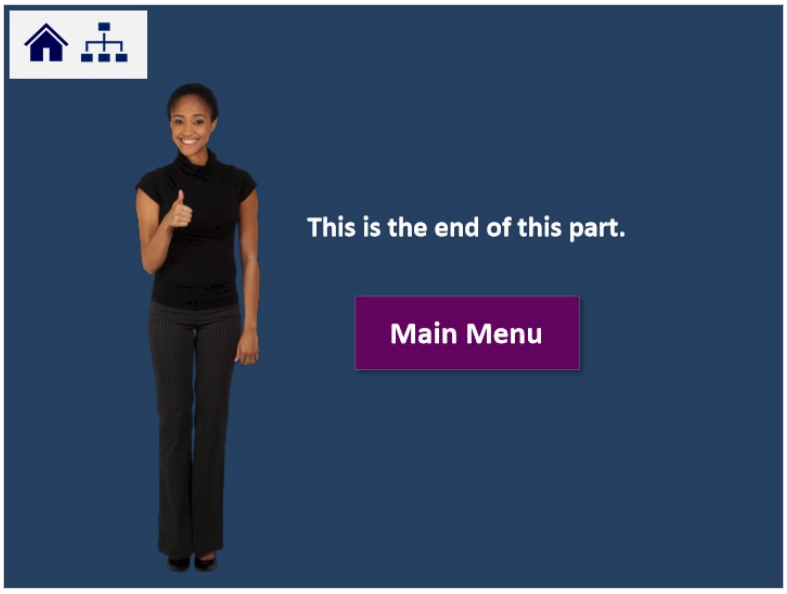
6.5 Reflection Question 2



ABC Tool Events (Slide Layer)



6.6 Bookend: Section 5



6.7 Module Cover