Evidence-Centered Design as a Foundation for ALD Development

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Overview of Session

Domain Analysis
- Content
- Skills

Domain Model
- Claims
- Evidence
- ALDs

Assessment Framework
- Task models
- Form assembly specifications

Iterative

Increasing specificity
ALDs Role in Score Reporting

- Communicate what scores mean
- Communicate what examinees at different performance levels know and are able to do
- Descriptions of performance level communicated through the ALDs
ECD & ALDs

• Through the domain analysis & domain modeling, claims and evidence pairs are generated.

• These claims and evidence pairs and evidence pairs are then mapped onto the performance continuum.

• Focus is on exemplar claims that differentiate performance levels.
Articulation of ALDs

- Using exemplar claims SMEs then put into words the defining characteristics of the performance level to generate preliminary ALDs
- Iterative process
  - Identification of gaps in current set of claims
  - New claims may identify need to refine ALDs
Benefits of Creating ALDs with ECD

- Continues the direct connection to intended score interpretations (through claims and evidence pairs)
- Reinforces the need to have tasks developed and included in the assessment that represent the ALD levels of performance – both in item development and form assembly specifications
- Strengthens the trail of validity evidence to support score interpretation and use
Illustrative study

- History (World, European, US)
- SMEs from the committees who worked on the domain analysis and generated claims and evidence pairs
General Procedures

• Work in subject-specific groups
  • Map illustrative claims (typically 3) from the major domain topics identified from the domain analysis to score levels 3, 4, 5
  • Synthesize these claims into ALDs for score levels 3, 4 & 5

• Discipline-level ALDs
  • Look for similarities across subject-specific ALD
  • Articulate discipline-level ALDs based on commonalities
History ALDs: ECD Input

- Domain analysis organized content primarily by time periods
- Claims and evidence pairs from domain modelling
- Draft Historical Thinking Skills
History: Subject-specific Groups

- Orientation included modeling of how a claim could be modified (e.g., through changing the HTS) to change its location on the score continuum
- Each group was tasked with mapping (or modifying) exemplar claims onto performance continuum
- Forms were provided for recording exemplar claims
- Each group chose own strategy; task to be completed by end of day
History: Generation of Draft ALDs

• Subject-specific groups: morning task
  • Bulleted lists/tables
  • Preparation of presentation

• Discipline ALD
  • Afternoon
  • Each group presentation
  • AP History coordinator summarized, looked for trends and commonalities
Results

• Generated less than fully articulated subject-specific ALDs or discipline ALDs
  • Generated bulleted lists
  • Identified “difficulty drivers”
  • Needed more time to process similarities
Iterative Process

- Expected that subject-specific and discipline-level ALDs would not be fully articulated
- Study was first step in generating initial ALDs
- These were then used to develop more claims and evidence pairs for domain modeling
- Symbiotic relationship through iterations
  - Claims informed initial ALDs
  - ALDs were refined by more development of claims
Orientation clear 100%
Orientation helpful 100%
Understood purpose 100%
Understood task 82%
Adj perf cats 73%
Mapping for ALDs 90%
Consensus 90%
Time 82%
Role in ALDs 100%
Subject-specific ALD 90%
Conclusion

- ECD supports intended score interpretations through
  - Domain analysis & modeling -- claims and evidence pairs
  - Claims and evidence pairs are mapped to score scale -- create ALDs
  - ALDs helps inform task development & form assembly specifications
  - ALDs and examinee performance can inform cutscores & provide validity evidence