

# Continuous Testing

(an avenue for CAT research)

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# Publishing an Adaptive Test

- Write Items
- Field Test Items
- Select an Operational Pool
- Publish Pool
- Distribute Pool
- Administer Tests
- Rinse and Repeat

# Problems with Publishing

- The static pool
  - Restricts content
  - Restricts psychometrics
  - Restricts corrections
  - Structures item exposure
- The publication process
  - Creates logistic problems
  - Slows response to new content

# Item filtration – An alternative to test publishing

- Realtime test creation
- Begins with entire item pool
- Removes items until one item is chosen to administer

# Filters

... could include

- Psychometric characteristics
- Item content
- Item usage data
- Item style
- Age level appropriateness
- Test taker engagement
- Test taker interest
- etc



# Example

- Full pool (3000 items)
- Remove sequestered items (leaving 2000)
- Remove wrong grade (leaving 1200)
- Chose for content (leaving 550)
- Remove already seen (leaving 400)
- Identify all with minimum info (leaving 52)
- Select least used (leaving one to admin)

# Advantages

- Easy item usage control
- Easy item drift control
- Extreme content control
- Removal/Editing of bad items
- Addition of new items
- Parameter estimate updates
- Item sequestering



# Research Questions

- Since filtering adds constraints, what is the psychometric impact?
- Can we use filtering to control item drift?
- How does filtering interact with item selection?