

Continuous Job Analysis

Web-based Evaluation

Continuous model may be a good fit

- Does content change more frequently than it is being reviewed?
- Do you want to distribute the cost of study over time?
- Does your program have a large enough population of candidates to support TD activities?
- Do your volunteers have time?

Current fixed Job Analysis model limitations

- Typically, a “snapshot” of practice for approximately five years
- Doesn't meet the needs of a changing profession
- Return sample is a one or two shot deal (researchers have less control over sample by not having ability to conduct multiple follow-ups)

Preferred Requirements for any Job Analysis

- Conduct exhaustive review of content.
- Use advisory committee to facilitate survey development and review results.
- Collect importance and frequency information on each task.
- Sample the population (Generalizability).
- Analyze data across appropriate subgroups (e.g., geographic region, years experience).
- Collect appropriate demographic data to define samples.
- Analyze the reliability of raters and the instrument.
- Review comments from survey participants.
- Evaluate representativeness of sample.

When Does Content Change?

- Traditionally, recommendations for content re-evaluation have been approximately every 5 years.
- This duration is somewhat arbitrary as the likely real answer is
 - it depends on the profession;
 - what and who affects the change in content.
- Cost plays a role in the decision as to when a job analysis study is conducted.

3 year-cycle example (CMTO)

Year one

- 1 beta test a-
 - What is missing?
 - Similar/redundant info?
- 2 beta test b-
 - Is anything outdated?
- 3 conference call
- 4 finalize survey

Each Year

- general ratings
 - Total population (minus beta a and beta b) divided by 30 monthly ratings (10 x 3 years). All newly certified are required to complete survey
- Data summarized 3 times per year; end of year data are reported.
- In December, meeting is held to review the data and make content changes.
- In January, test specs are updated and examination needs are modified

Considerations

- Each year new certificants are added to the total sample
- Each year certificants leave the profession
- Return rate assumptions must be accurate or updated to reflect reality
- At the end of the third year, the sampling is re-evaluated to reflect the current population.
- No certificant is sampled more the 1 time during three year cycle.

Sampling for 3 year design

- 30 samples (10 months per year)
- Each sample to represent geographic area, years practicing, and work setting.
- All new certificants should be required to complete survey
- Allows modifications in sample design to answer specific research questions.
 - How does sub population view these tasks
 - What are the perceptions of the educators
 - Research Design analyses (e.g., does group x differ from group y)
- Attention to sampling pool must be maintained so that year 3 is still a valid sample.

Potential Limitations

- Electronic- need updated email addresses
- Potential Test and Research consequences
 - Need to continually address new item development needs
 - Need to pretest items more aggressively
 - Need to evaluate appropriateness of cut-score
 - Need to evaluate content change effects on current IRT scale
- Must manage database and sampling on a monthly basis

Benefits

- A fluid, not a static, model that asks what is practice for the next five years.
- Recently reviewed content by designed sample
- Reduced “ramp up” time—content review
- Population of practitioners provides newest content and methods of practice on an annual basis (not limited to advisory committee)
- Accurate information on Entry-level practice (all new certificants are encouraged to participate)
- Control over sampling
- Quantify practice trends over time.