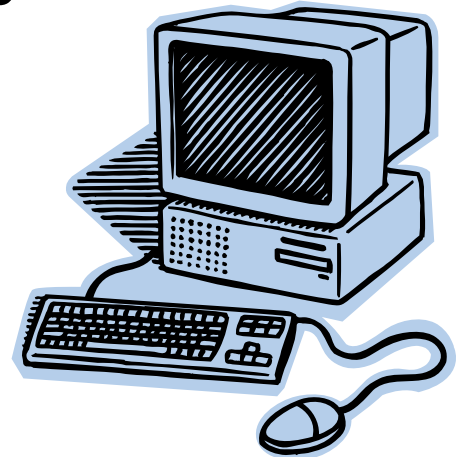


Pennsylvania's Computer-Administered Work Simulation Assessments

**Presented by
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PA State Civil Service Commission**

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PA Civil Service Commission

- Administers PA Merit system
- 60,000 state employees (2/3 of all) in 35 state agencies
- 9,000 county & local employees in 300 agencies
- Currently testing for 870 job classes
- 8 testing sites

PA Computerized Testing

- Began in 2002 for PA with ICE
- Written multiple-choice tests
- Candidates loved it!
- How do we adapt work simulations?
- How do we adapt the technology?

Work Simulations

- Reflect reality by presenting job situations, samples of work done
- Can be labor-intensive to design and develop
- High Predictive Validity
- High Content Validity when linked to job study
- High Reliability

PA's Work Simulations

- Reality-based but is controlled reality
- Written, time-limited, computerized
- Applied to state/local jobs such as
 - Judicial and hearing officer titles
 - Law Enforcement/Corrections
 - Supervisory
 - Managerial and Administrative
 - Entry-Level

Advantages of Written Work Sims

- Assess a wide range of jobs
- Assess a wide range of job requirements
- Highly adaptable and cost-effective
- Candidate Acceptance is High
- May give candidate a job preview
- High validity and reliability
- Rater training increases inter-rater reliability for non-computer scored tests

Three Basic Types

1. Situation (Factor) Based

- Computer Scored
- Human Rater Scored
- Hybrid

2. Knowledge Based

3. Work Behavior Based

Factor Based

- Group KSAs into factors for testing, i.e.,
 - ❖ Interpersonal Skills
 - ❖ Judgment
 - ❖ Decision-Making
 - ❖ Communication
- Candidate presented situations that link to one or more factors

Factor Based

- Computer Scored
 - Multiple choice questions link to factors
 - Use differential weighting for answer choices
 - Limit available choices for the candidate
- Rater Scored
 - Suggested response guidelines
 - Clear scoring criteria
 - Be sure to ask the right question!
- Hybrid – combines the two

Computer Scored Type

Presents one or more developing situations

- One decision point at a time
- A limited list of actions as answer choices
- Correct actions scored +1
- Incorrect actions scored -1
- Computer scoring and statistics
- Can use video, audio, reference documents, etc
- Candidate cannot change response

Rater Scored Type

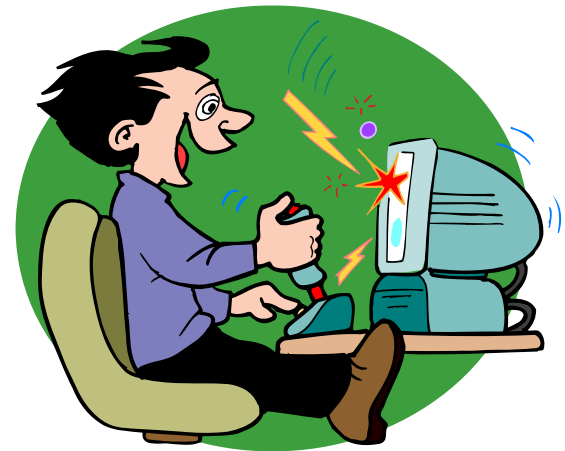
- Candidate is presented a situation and must explain actions that should be taken and why
- Response is a narrative
- Questions can be open-ended or specific
- Each question may measure more than one factor
- Written Communication is usually a factor

Hybrid Type

- Uses both computer scored and human rater scored exercises for different factors
- Scored as a one-part test
- Easy to administer
- Uses specific scoring benchmarks and criteria

Knowledge-Based

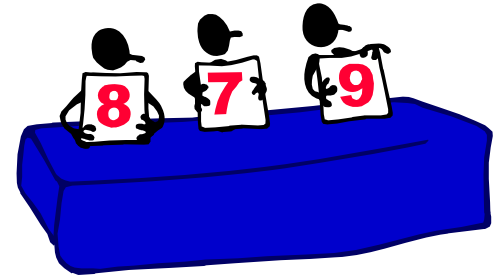
- Computer administered essay exams
- Print outs scored by SMEs
- Each exercise rated separately
- May involve reference material
- Usually not entry-level



Scoring Benchmarks

- **Outstanding** Demonstrated an exceptional knowledge.... Response is presented in a very understandable manner – 4 points
- **Qualified** Demonstrated an adequate knowledge.... Response was presented in a reasonably understandable manner – 2 points
- **Not Presently Suitable** Lacked a basic knowledge..... Response was presented in a very confusing manner – 0 points

Scoring



- Rater Guidelines are specific
 - Candidates do not need to identify existing principles but should make the case for their opinions.
 - Better responses will be based on research or best practices. It is not necessary for the candidate to be specific as to the source of the information.

Work Behavior Based

- Writing a letter
- Preparing a legal opinion
- Reviewing a report
- Writing a position paper



Writing a Letter

- Candidate is presented stimulus letter, list of facts, and instructions
- Candidate writes a response letter as a part of a test (written, performance, or oral)
- Raters score the letter based on standard criteria



Preparing a Legal Opinion

- Candidate is given reference material
- Questions are presented on-screen
- Response is entered
- Human scored



For Example

- Candidates are given three case studies to analyze and are instructed to do the following for each :
 - (1) Make the relevant findings
 - (2) Write the Reasoning
 - (3) Write the Order





Reviewing a Report

- Candidate is presented one or more reports
- Required response may be a narrative rated by SMEs
- Or, response is a series of multiple-select, multiple choice questions

Writing a Position Paper

- “Given the facts presented, how would you handle the situation and what recommendations would you make to senior management to further address the issues involved?”
- Rater Scored according to specific criteria
- No right or wrong responses

Generic Management

- Candidate presented in-box materials
- Questions are based on the items “How would you handle Item #1?”
- Human Rater Scoring
- Specific Guidelines for Raters
- Criteria for scoring pre-set
- Face Validity Changes by SMEs

Selecting the Type

- Base on Job Analysis Data, Linkage
- Type of job?
- How much flexibility do incumbents have?
- How many candidates?
- How many SMEs/raters?
- How much time is available to develop?
- What technology do I have available?

Contact

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