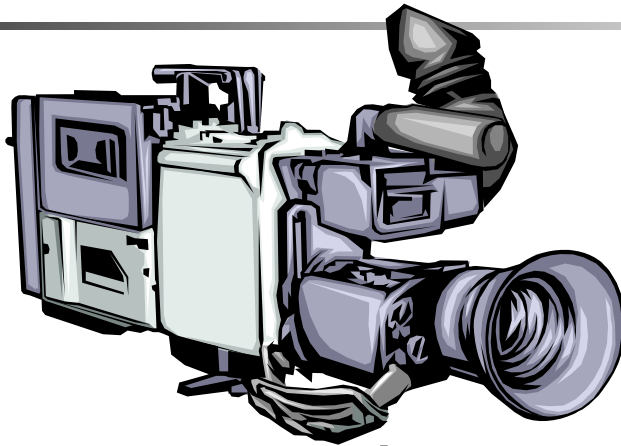


# Wagering on a Winning Video



- James Frankart
- Presented June 28, 2006
- IPMAAC Spring Conference
- Las Vegas Nevada

# A picture is worth a thousand words (Old Chinese Proverb)





# Objectives

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- Be aware of research on using video tools
- Learn how to develop and produce video tools that can be used in the personnel assessment process
- Give you the benefit of our experience with video tools

# Why Do Video Testing?

- Like it or not, we live in a video age
- Don't believe me, go to Google and type in Video Assessment (96,400,000)
- Video has many applications beyond selection



# Video Assessment Web Pages

## *Example*

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- Video Assessment of Environmental Management Plans
  - Dr. Robert MacFarlane – University of Northumbria, Scotland
    - Students must develop a land use plan for environmentally sensitive areas
    - Work groups must produce 10 minute video outlining their plans



# Video Assessment Web Pages

## *Example*

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- New York State Teacher Certification Examinations
  - Since 1994, New York State Department of Education added a video component to the teacher certification test
  - Generic and content areas are tested
  - Teachers submit videos to demonstrate knowledge of content



# Video Assessment Web Pages

## *Example*

---

- Math Forum at Drexel
  - Uses video to assess student's ability to perform math problems
  - Students are called to board 1 by 1 and solve a math problem
  - Responses are taped so they can be analyzed later
  - Responses are shared with parents



# Video Assessment Web Pages

## *Example*

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- Automated Video Assessment of Human Performance
  - Andrew Gordon – Northwestern University
  - Detailed paper on alternatives to traditional testing methods
  - Can be tied to computers to automate the process
  - Example uses gymnasts to evaluate performance





# Video Assessment Web Pages – Job Related *Example*

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- B Pad
- Details result of using video test to screen applicants for Austin PD
- Reduce applicant pool by 1/3 saving \$150,000 in background investigations
- Measures Decision Making and Communication skills
- No Adverse Impact



# Video Assessment Web Pages – Job Related *Example*

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- Learning Resources Inc.
- Uses video situations to measure soft skills
- Claimed to assess 2 and ½ million
- Advantages
  - Increased productivity
  - Reduce turnover
  - Developmental needs
  - Realistic Job Preview



# Advantages

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- Fidelity
- Lower Adverse Impact
- Reduces Reading Requirement
- Validity
- Candidate Acceptance
- Face Validity



# Disadvantages

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- Costs a lot
  - Can cost less today
- Requires a lot of time to develop
- Requires facilities and equipment to administer the tests



# Basics of Video Production

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- Before we produce video
  - Planning, Planning, Planning
    - What – finished product
    - Why – purpose of the video
    - Who – personnel involved
      - Writers, actors, camera operators
    - Where - location
    - When – schedule and sequence of events



# Basics of Video Production

---

- Program development
  - Brainstorm ideas
    - Collect your subject matter experts
    - Have them give examples of critical incidents
    - Include both good and bad examples
  - Refine and select
    - Prioritize incidents
    - Look for a variety



# Basics of Video Production

---

- Scripting
  - Write out scenarios
  - Develop characters for the scene
  - Visualize what it will look like on the screen
  - Complexity of the situation



# Basics of Video Production

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- Talent
  - Recruitment
    - Diversity of talent (gender, race, age)
  - Auditions
    - Speaking Vs Non Speaking roles
  - Rehearsals
  - Release Forms
    - Confidentiality
    - Performer





# Basics of Video Production

---

- Filming schedule
- Make sure all relevant persons have copies of the schedule
  - Include supervisors
- Try not to involve critical persons who can be called away at any time



# Basics of Video Production

---

- Filming
  - Survey the site
    - Are the condition favorable for filming
    - Lighting – look for shadows, backlighting
    - Sound – be aware of background noise, how thick are walls, what kind of microphone
  - Observe the filming
  - If not satisfied, do it over



# Basics of Video Production

---

- After the Filming
  - Pre edit
    - Review/log raw footage and select the best
    - Saves time and money
  - Edit
    - Add extras – narration, music, special effects
  - Reviews and approvals
  - Duplication



# Areas Where We Use Video Tools

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- Selection
  - Corrections Officer Exams
- Recruitment
  - Realistic Job Previews
- Training
  - Mock Candidates
- Test Administration
  - Structured Oral/Work Simulation Exercises



# Selection

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- Used to measure a variety of topic areas
- Two programs where we used video
  - Corrections Officer Trainee
  - Corrections Officer 2 (Sergeant)



# What Does the Research Show

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- The next series of slides will show a number of studies on video testing
  - Cognitive skills vs. conflict resolution
  - Paper & pencil vs. video test
  - Stimuli & responses are videotaped
  - Corrections officers interacting with inmates
  - PA Corrections Officer tests



# Interactive Video Assessment of Conflict Resolution Skills

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- Olson-Buchanon et al in Personnel Psychology
- (1998)
- Used a Branching test as a measure of Conflict Resolution Skills
- Collected information of Conflict Resolution as well as verbal and cognitive abilities
- Criterion was manager ratings
- Conflict skills were found to be significantly related to ratings but cognitive skills were not related
- Conflict skills had no adverse impact for women



# Video Based Vs Paper and Pencil Method of Assessment

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- Chan D. & Schmitt N. 1997 J A P
- Tested difference between the two methods
- Results
  - Video based tests had
    - Lower Black White Differences
    - Better candidate acceptance (Face Validity)
    - Less Reading Comprehension required





# Performance Based Testing of Interpersonal Competence

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- Corey D. & MacAlpine D: 1995 B-PAD Technical report
- Both the stimuli and the responses are videotaped as an applicant plays the part of an incumbent
- Results show
  - No mean differences between all groups
  - Standardize the stimuli for all candidates



# Corrections Officer Video Test Validation Report

---

- Swander C. & Spurlin O. 1994 Ergometrics
- Used a video based test to test how candidates might interact with inmates
- Looked at test in a variety of states
- Results
  - Positive reduction in turnover & sick leave
  - Small adverse impact between groups
    - Less than other testing methods
    - Reduced reading requirement



# The Selection of Entry Level Corrections Officers – PA Research

---

- Steve Berkley & Charlie Sproule
  - Outlines the 25 year evolution of testing procedures for entry level Corrections Officers
  - Test has undergone many changes:
    - >1981 = multiple choice general abilities test
    - <1981 = more face valid and added oral
    - 1992 = writing sample was added
    - 1996 = oral and writing sample eliminated, many of the same concepts measured with video segments



# The Selection of Entry Level Corrections Officers – (Continued)

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- In 1996, the Structured Oral and Writing Sample were dropped from the examination due to budget
  - Same concepts in 1992 test plus
    - indirect measurement of writing ability (Clarity of Expression)
    - section on Judgment & Problem Solving
    - the two new subtests have not yet been validated
  - The first class to go through the Academy after this test was implemented received the highest scores ever
  - New test saves the Commonwealth about \$500,00 per year



# Entry Level Corrections Officers

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- Subject Areas Measured
  - Video Based
    - Judgment & Problem Solving
    - Observation
    - Following Oral Instructions
  - Non Video Based
    - Understanding Rules and Regulations
    - Following Written Instructions
    - Clarity of Expression



# Entry-Level Corrections Officers

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- Judgment & Problem Solving
  - Consists of 7 short scenes
  - After viewing the videos applicants respond to a several questions
  - Yes = they should take the action
  - No = should not take the action



# Entry-Level Corrections Officers

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- Observation
  - Subtest consists of 3 scenes
  - After viewing each scene, applicants respond to a series of multiple-choice questions
  - Total of 25 questions for the three scenes



# Entry-Level Corrections Officers

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- Following Oral Instructions
- Subtest consists of 2 video scenes
  - Applicants view scene of an officer giving instructions on the day's activities
  - Applicants can take notes
  - After the scene, they are asked multiple-choice questions about their orders





# Entry-Level Corrections Officers

---

- Remaining three subtest are non video
- Items are 4 choice multiple-choice
- 10 items on Rule's & Regulations
- 10 items on Following Written Instructions
- 15 items on Clarity of Expression



# The Selection of Entry Level Corrections Officers

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## ■ Results

- Did validation studies in 1984 and 1996
- Validity increased from .34 to .69
- Adding video to test reduced group differences by race and gender
- Adverse Impact ratios were 84% for Blacks vs. Whites and 64% for male vs. females
  - M v F difference in selection ratio was veterans' preference



# Written Multiple Choice Test – Corrections Officer 2

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- 105 items
- Job Knowledge test
- Content Areas
  - Observation, Visual Perception, Memory
  - Security Methods and Analysis – Judgment
  - Written Communications – Effective Expression
  - Rules, Regulations, Policies & Procedures



# Reasons for Change

---

- New job study conducted in 1997
  - Previous study done in 1982
  - Had better information about what job requires
- Make testing process easier for candidates & less burdensome for staff
- Cost of testing
  - Estimated new saved \$125,000.00



# New Video Based Test

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- Written, Machine Scored Test
- Measures the same concepts as previous exam – Oral Communication
  - Can be assessed through employment interview
- Three hours long
- Self Administering



# New Video Based Test (continued)

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- Measures four subject matter areas
  - Safety and Security
  - Effective Working Relationships
  - Report Writing
  - Rules and Regulations
- Developed enough video scenes to complete two versions of the test

# Safety and Security (Two Video Scenes)

- Measures ability to identify appropriate and inappropriate actions relating to Safety and Security issues likely to occur on the job
- 50 Questions
- Based on
  - A10 = Exercise proper judgment on the job
  - A11 = react quickly and calmly to situations
  - A14 = Understand significance of changes in behavior of inmates/staff



8/18/2006

# Effective Working Relationships (2 Scenes)

- Measures ability to establish and maintain Effective Working Relationships with staff (focus is primarily on dealing with staff)
- 50 Questions
- Based on



- A4 = establish and maintain effective working relationships with others
- A13 = coordinate and direct the work of others





# Report Writing ( Two Scenes)

---

- Measures your ability to communicate in writing by identifying appropriate information on a misconduct report. Report must be clear, concise, and correct
- 20 Questions
- Based on
  - A6 = prepare reports which describe incidents
  - A7 = Review reports that describe incidents
  - A12 = recall relevant information about incidents



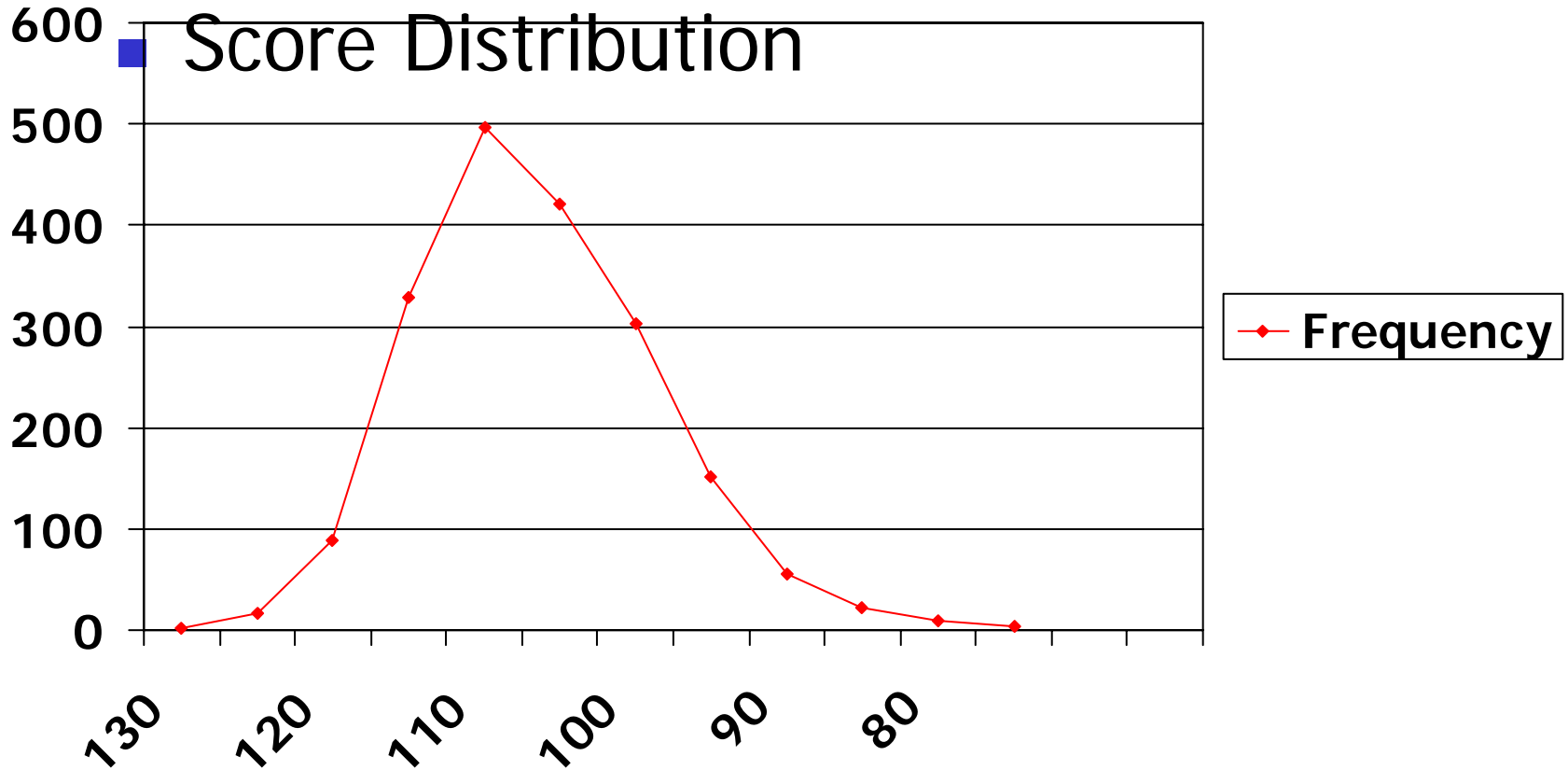
# Results

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- Test was a huge success
- On June 25 & 26, 1999 we tested 1897 applicants
- Applicant reaction was favorable
- Most were happy the oral was gone

# Results (Continued)





# Results (Continued)

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- Validity based on Content Model
- Each Institution was represented by a Subject Matter Expert
- Scoring was based on consensus of raters
- DOC Personnel has been very satisfied with the quality of applicants



# Recruitment

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- Realistic Job Previews
  - Can give the applicants a realistic picture of the job duties performed
- Issues
  - Complexity of job
  - Criterion used
  - Timing of the intervention
  - Turnover

# Recruitment – Research



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- Effects of Realistic Job Previews on Multiple Organizational Outcomes – A Meta Analysis
- Jean M. Phillips, Rutgers, 1998
- *Academy of Management Journal*



# Recruitment - Research

---

- Examined 3 moderators
  - Setting
    - Laboratory vs. Field
  - Timing
    - Early vs. Late
  - Medium
    - Video vs. written vs. verbal



# Recruitment - Research

---

- Results
  - Setting
    - Lab setting has lower turnover & attrition
  - Timing
    - Late in recruitment process is better
  - Medium
    - Video is most effective way to present info
  - These findings were generally supported





# Recruitment - Research

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- Research on Employee Recruitment: So Many Studies, So Many Remaining Questions
- James Breugh and Mary Stark
- *Academy of Management Journal*
- *2000*



# Recruitment - Research

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- Did a comprehensive search of the literature relating to recruitment
- Focus on RJP research
- Theoretical models common threads
  - Allow for self selection where job does not meet expectations
  - Persons will be more committed when they accept the job



# Recruitment - Research

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- Raises Issues
  - Method of presenting job preview
    - Pamphlet, video, or interview
  - Cost
  - Economic conditions
  - Negative information
  - Specific event or multiple event



# Recruitment

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- Developed a Realistic Job Preview for County Caseworker
- Three job areas
  - Children and Youth
  - Mental Health/Mental Retardation
- Soon will be on Internet



# Training

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- Training oral raters
  - Videotape mock candidates
  - Use at multiple locations
  - Standardize stimuli for raters
  - Whole panel vs. talking head



# Test Administration

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- Online application has lead to persons applying but not showing when scheduled
- Increasingly difficult to get oral raters from the agencies
- Oral exams are videotaped
- Rated later by a panel of trained raters



# Test Administration

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- Item in room
  - Camera
  - Monitor
  - Recorder
  - Candidate
  - Proctor
  - Table



# Test Administration

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- Advantages

- Records accurate record of candidate performance
- Easily reviewable by candidate
- Candidate acceptance
- No lost time because candidate did not appear
- Better use of raters time
- Raters can review the DVD if there is a question on a candidate's response

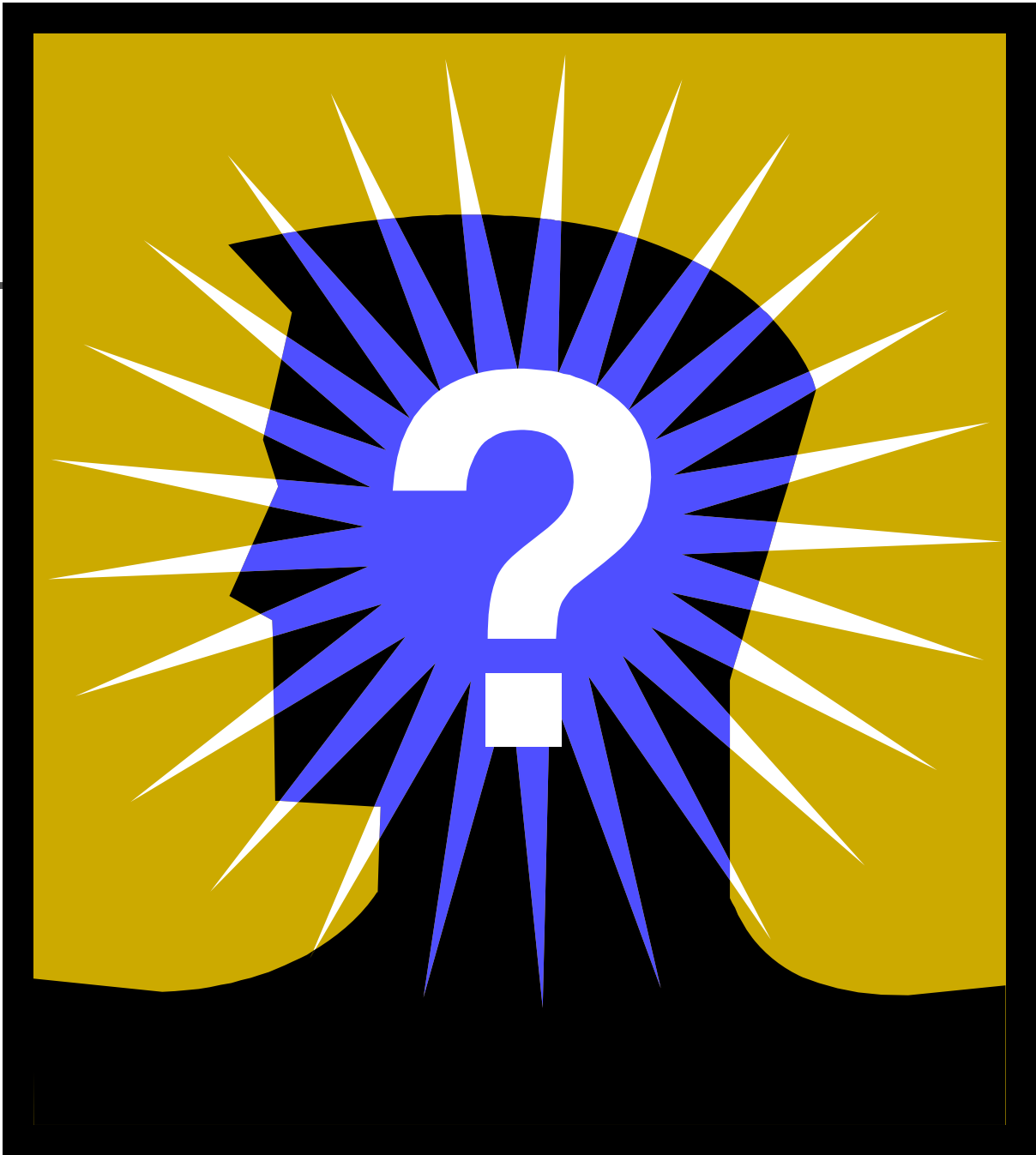
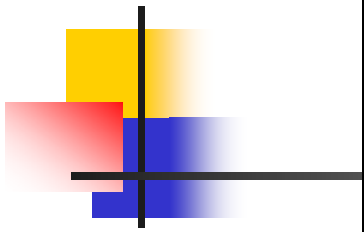




# Test Administration

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- Confidentiality forms
  - One for exam material
  - One for permission to videotape
- Capitol Police Sergeant exam





# Where to Get More Information

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- Call me or e-mail me
  - (717) 787 - 5974 ext 3533
    - Jfrankart@state.pa.us
  - Journals
  - Textbooks
  - World Wide Web