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# Adventures in Assessing and Computer-Scoring Job Experience

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# Session Goals

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- Provide the background of the Universal Job Experience Measure (JEM)
- Describe the JEM's features and how the JEM works
- Discuss some of the challenges in scoring work experience (technical & applied)
- Discuss future plans for the JEM



# Immigration Officer Assessment Strategy

<i><b>Competency Area</b></i>	<i><b>Decision Making</b></i>	<i><b>In-Basket</b></i>	<i><b>Writing</b></i>	<i><b>Job Experience</b></i>
Thinking Skills	X			
Administrative Skills		X		
Writing Skills			X	
Prior Work Experience				X



# Immigration Officer Assessment Weighting Scheme

<b>Assessment</b>	<b>Weight</b>
Prior Work Experience	30
Decision Making	30
In-Basket	20
Managerial Writing	20



# Requirements for the New JEM

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The new Job Experience Measure (JEM) must be:

- Valid and reliable
- Objective and easily verifiable
- Flexible, covering a range of relevant work experiences
- Computer scored
- Perceived as fair and balanced by candidates and hiring managers



# Developing the JEM

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- Review the research literature to guide our development of a measure of job experience
- Develop a model for the new job experience measure
- Work with Subject Matter Experts to develop the new job experience measure



# Research Findings

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- Substantial support exists for the use of an objective measure of job experience
  - » *Experience provides an indirect measure of job knowledge*
- Research supports the validity of this measure of job experience in predicting job performance ( $r = .32$ )
- As the length of job experience increases, each additional year contributes less to validity
- Also important is the specificity, or correspondence of the experience to tasks in the target position



# The JEM Model

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- The JEM collects two kinds of job experience
  - » Overall Work Experience – Part I (80%)
  - » Specific Assignments – Part II (20%)



# Part I: Scoring Assumptions

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1. The most learning at a position occurs in the first few years it is held
2. In general, positions in the same occupation as the target position are more valuable than positions in a different occupation
3. The most valuable experience for the target position is experience gained at the level just below target position



# Part I: Scoring Model

<b>Job Title and Grade</b>	<b><u>Length of Experience</u></b>		
	<b>1 – 3 years</b>	<b>4 – 6 years</b>	<b>7 – 10 years</b>
<b>Highly Related</b>	Full credit	2/3 credit	1/3 credit
<b>Moderately Related</b>	2/3 credit	4/9 credit	2/9 credit
<b>Somewhat Related</b>	1/3 credit	2/9 credit	1/9 credit



# Universal JEM Scoring

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- Candidates will receive credit for full-time positions
- Candidates can only receive credit for one full-time position at a time
- Points will be credited by:
  - » Title
  - » Grade
  - » Length of time



# Part II: Scoring Rules

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- Any specific assignment listed can only receive credit once
- All assignments receive a “flat point value” for all assignments
  - » *except Acting Supervisor, which has a sliding value based on length of time*
- Candidates have an opportunity to receive credit for one assignment that is not listed
- Candidates must perform an assignment for a minimum of two full-time months before credit is awarded



# Universal JEM Requirements

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- Flexible--allows reporting from a variety of backgrounds and experiences
- Simple to complete
- Easy to review
- Intuitive and logical
- Scored by computer
- Able to shift review responsibility to candidates
- Able to minimize candidate entry errors



# Universal JEM Layout

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- Instruction Booklet
- Universal JEM Form
  - » General Information
  - » Part I: Work Experience
  - » Part II: Specific Assignments



# Part I: Work Experience Blocks

<b>Work Experience Block #:</b> <input type="text" value="1"/> Most Recent		<b>14. Dates of Experience</b>			
<b>12. Work Experience Code</b> <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="7"/>	<b>13. Grade Level</b> <input type="text" value="1"/> <input type="text" value="3"/>	<b>From</b> <input type="text" value="1"/> <input type="text" value="0"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="8"/> Month Year		<b>To</b> <input type="text" value="1"/> <input type="text" value="2"/> / <input type="text" value="2"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> Month Year	
<b>15. Print the name, address, and phone number of the supervisor who can verify this work experience:</b>					

<b>Work Experience Block #:</b> <input type="text" value="2"/>		<b>14. Dates of Experience</b>			
<b>12. Work Experience Code</b> <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="3"/>	<b>13. Grade Level</b> <input type="text" value="1"/> <input type="text" value="2"/>	<b>From</b> <input type="text" value="1"/> <input type="text" value="2"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="5"/> Month Year		<b>To</b> <input type="text" value="1"/> <input type="text" value="0"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="8"/> Month Year	
<b>15. Print the name, address, and phone number of the supervisor who can verify this work experience:</b>					

<b>Work Experience Block #:</b> <input type="text" value="3"/>		<b>14. Dates of Experience</b>			
<b>12. Work Experience Code</b> <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="7"/>	<b>13. Grade Level</b> <input type="text" value="1"/> <input type="text" value="3"/>	<b>From</b> <input type="text" value="0"/> <input type="text" value="5"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="5"/> Month Year		<b>To</b> <input type="text" value="1"/> <input type="text" value="2"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="5"/> Month Year	
<b>15. Print the name, address, and phone number of the supervisor who can verify this work experience:</b>					



# Part I: Data Quality Checks

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## Check for:

- » missing data
- » logical dates
- » overlapping dates
- » invalid codes
- » invalid title/grade combinations
- » titles that need substantiation
- » last data reported does not exceed cut-off period (e.g., 12/2001)



# Part II: Specific Assignments

Specific Assignment Block #: <input type="text" value="1"/>		
16. Assignment Code	17. Dates of Experience	18. Number of Full Workdays Performing this Assignment
<input type="text" value="G"/> — <input type="text" value="0"/> <input type="text" value="2"/> Letter      Number	From      To <input type="text" value="1"/> <input type="text" value="0"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="3"/> <input type="text" value="0"/> <input type="text" value="2"/> / <input type="text" value="2"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/> Month      Year      Month      Year	<input type="text" value="88"/> workdays
19. Print the name, address, and phone number of the supervisor who can verify this work experience:		

Specific Assignment Block #: <input type="text" value="2"/>		
16. Assignment Code	17. Dates of Experience	18. Number of Full Workdays Performing this Assignment
<input type="text" value="G"/> — <input type="text" value="0"/> <input type="text" value="5"/> Letter      Number	From      To <input type="text" value="0"/> <input type="text" value="9"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="5"/> <input type="text" value="0"/> <input type="text" value="9"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="8"/> Month      Year      Month      Year	<input type="text" value="72"/> workdays
19. Print the name, address, and phone number of the supervisor who can verify this work experience:		

Specific Assignment Block #: <input type="text" value="3"/>		
16. Assignment Code	17. Dates of Experience	18. Number of Full Workdays Performing this Assignment
<input type="text" value="C"/> — <input type="text" value="0"/> <input type="text" value="3"/> Letter      Number	From      To <input type="text" value="0"/> <input type="text" value="6"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="9"/> / <input type="text" value="1"/> <input type="text" value="9"/> <input type="text" value="9"/> <input type="text" value="1"/> Month      Year      Month      Year	<input type="text" value="60"/> workdays
19. Print the name, address, and phone number of the supervisor who can verify this work experience:		



# Part II: Data Quality Checks

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## Check for:

- » missing data
- » logical dates
- » invalid codes or dates
- » impossible number of workdays given the time period reported
- » an end date that does not exceed the cut-off period (e.g., 12/2001)



# Database/Technical Challenges

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- Programming challenges
  - » Table structures
  - » Data checks
  - » Scoring procedures
- Integration Challenges
- Expansion/Enhancement Challenges



# Lessons Learned

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- The devil is in the details
- The more you can standardize, the more reliable and accurate the information
- Start small and grow
- Separate the instructions from the form
- Allow ample time for reviewing and scoring
- Think big!



# Future Direction for the JEM

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- Web-based entry
- E-mail submission process
- Candidate retrieval process
- Instant scoring and feedback
- Linked HR system for verification



# So, do you really want to do this???

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## ● Challenges

- » Errors in reporting work experience
- » Evaluating qualitative differences of experience
- » Scaling differing types of experience
- » Time to rate experience if reported in narrative format
- » Developing a meaningful key for different positions



# So, do you really want to do this???

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- Benefits

- » Validly predicts future job performance
- » Highly reliable, if standardized
- » Verifiable
- » Adds balance to testing strategy
- » Perceived as fair and intuitive
- » Flexibly to assess different kinds of experiences in multiple ways



# Contact Information

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