



PTC-NC Presents:

**Multiple-Choice Item Format
Recommendations: Effects on Item Difficulty
and Discrimination**

Presented by

Jason Schaefer, M.A., M.B.A., IPMA-CP
CPS Human Resource Services

■ **WHEN:**

Thursday, April 8, 2009

■ **WHERE:**

The Firehouse Restaurant
Room: Courtyard Grill
1112 Second Street
Old Sacramento, CA 95814
(916) 422-4772

■ **AGENDA:**

10:30 - 11:00 a.m. Registration
11:00 - 12:00 p.m. Presentation
12:00 - 1:00 p.m. Lunch

■ **MENU:**

See the following page

■ **COST:**

PTC Members \$20
PTC Student Members \$10
Non-Members \$25

Many organizations that develop multiple-choice (MC) items for high-stakes examinations have adopted item writing guidelines to improve item and test performance. However, many of these guidelines appear to be based more on reasoning and experience and are lacking in empirical evaluation (Haladyna, Downing & Rodriguez, 2002).

This presentation will provide a brief overview of the published literature concerning MC item format recommendations and present the results of an empirical study which investigated the effects of multiple-choice item stem completeness (complete sentence vs. incomplete sentence) and stem orientation (positive vs. negative wording) on item difficulty and discrimination.

Six hypotheses were tested using archival examinee data from the reading comprehension sections of 30 employment selection exams. Three multivariate analyses revealed that item difficulty and discrimination were not significantly affected ($p > .05$) by stem completeness or stem orientation. The Flesch-Kincaid Grade Level of the reading passage, passage length, stem length, and key length were used as control variables in the first two analyses, while no control variables were included in a third exploratory analysis. Limitations and practical applications of the findings will also be discussed.

➔ **RSVP with your menu selection from the following page to Heather Patchell
hpatchell@biddle.com (916) 294-4250 ext. 155 no later than Friday, April 2nd.**

Due to venue requirements, cancellations must be made by Friday, April 2nd or you may be required to pay the admission fee.

Menu Selections

Please choose one of the following entrees
and include your choice when you RSVP:

1. Vegetarian Sandwich

baked herbed focaccia stuffed with a blend of three cheeses
grilled zucchini, roasted red peppers, marinara sauce and waffle fries

2. Atlantic Salmon

heirloom tomato coulis and tomato-caper relish
fresh basil, garlic polenta and sautéed seasonal vegetables

3. Balsamic-Roasted Chicken

caramelized onion-peach compote and candied-almond confetti
garlic mashed potatoes and sautéed seasonal vegetables

About the Presenter

Mr. Schaefer is currently employed as a Senior Personnel Management Consultant in the Assessment unit at CPS Human Resource Services. The Assessment unit offers a broad array of high-quality assessment products and services to clients across the United States and Canada. At CPS, Jason contributes to survey projects, product development, job analysis, and test development. He also provides client support on testing and psychometric related issues. Jason holds an M.A., and M.B.A from California State University, Sacramento.