

## André A. Rupp

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### (a) CURRENT POSITION

since 2008     **Assistant Professor**  
*Department of Measurement, Statistics, and Evaluation (EDMS), University of Maryland, College Park, MD.*

**Affiliated with the Center for the Advanced Study of Languages (CASL).**

### (b) PREVIOUS PROFESSIONAL EMPLOYMENT

2005 – 2007     **Visiting Professor**, *Institute for Educational Progress (IQB)*, Humboldt-University, Berlin, Germany.

2003 – 2005     **Assistant Professor**  
*Faculty of Education, University of Ottawa, Ottawa, ON.*

### (c) EDUCATION

2001 – 2003     **Ph.D. in Measurement, Evaluation, and Research Methodology**  
*University of British Columbia, Vancouver, BC.*

1999 – 2001     **M.S. in Mathematics (Statistics emphasis)**  
*Northern Arizona University, Flagstaff, AZ.*

1997 – 1999     **M.A. in Teaching English as a Second Language (Applied Linguistics emphasis)**  
*Northern Arizona University, Flagstaff, AZ.*

1994 – 1997     **Undergraduate Studies in Mathematics, English, and French**  
*Universität von Hamburg, Hamburg, Germany.*

### (d) ACADEMIC HONORS

2003             **University Research Scholar**, *University of Ottawa, Ottawa, ON.*

2001             **Outstanding Graduate Teaching Assistant with Distinction**, *Department of Mathematics & Statistics at Northern Arizona University, Flagstaff, AZ.*

2001             **Outstanding Graduate Student**, *Department of Mathematics & Statistics at Northern Arizona University, Flagstaff, AZ.*

2000             **KDD-Cup**, *Knowledge Discovery and Data-mining (KDD)*, Boston, MA.

(e) TEACHING

Graduate Courses

2009	Multivariate Statistics
2008 – 2009	Modern Measurement Theories
2008 – 2009	Quantitative Research Methods I
2008 – 2009	Quantitative Research Methods II
2007	Modern Scaling Methods: From IRT to Cognitive Diagnosis Models
2006 – 2007	Methods, Foundations, and Applications of Diagnostic Assessment
2005	Advanced Measurement Theories
2004	Advanced Statistical Methods
2004	Recent Advances in Latent Variable Modeling
2004 – 2005	Methods and Interpretation in Quantitative Research II
2003 – 2004	Methods and Interpretation in Quantitative Research I
2002 – 2003	Introduction to Statistics for Research in Education

Undergraduate Courses

2008	Introduction to Educational Statistics
2003 – 2004	Curriculum Design and Evaluation in Education
2002	Learning, Measurement, and Teaching
2001 – 2002	Statistical Methods
2000 – 2001	Applied Statistics
1999	College Algebra
1998 – 1999	Freshman Composition

(f) EXTERNAL FUNDING

<u>Year</u>	<u>Foundation / Agency / Institution</u>	<u>Amount</u>	<u>Purpose</u>
2009	National Science Foundation (CAREER)	\$759,000 ( <i>submitted</i> )	Research
2009	National Science Foundation (SAMSI)	\$15,000	Conference
2009	National Science Foundation (EAGER)	\$94,500	Research
2008	National Science Foundation (DRK-12)	\$624,000	Research
2008	National Science Foundation (DRK-12)	\$449,000 ( <i>not funded</i> )	Research
2008	National Science Foundation (REESE)	\$496,000 ( <i>not funded</i> )	Research
2008	Institute for Education Sciences	\$247,000 ( <i>not funded</i> )	Research
2007	German Research Foundation	\$100,000	Research
2007	German Research Foundation	\$450,000 ( <i>not funded</i> )	Research
2006	German Research Foundation	\$120,000	Research
2005	Canadian Foundation for Innovation	\$120,000	Infrastructure
2004	Social Sciences and Humanities Research Council (SSHRC)	\$90,000	Research

(g) INTERNAL FUNDING

<u>Year</u>	<u>Foundation / Agency / Institution</u>	<u>Amount</u>	<u>Purpose</u>
2008	University of Maryland (GRB)	\$8,750	Research
2008	University of Maryland (SPARC)	\$10,000	Research
2003 – 2005	University of Ottawa	\$30,000	Research
2003 – 2005	University of Ottawa	\$3,000	Travel
2003	University of Ottawa	\$7,000	Research
2003	University of British Columbia	\$750	Travel
2002 – 2004	University of British Columbia	\$30,000	Research

(h) REVIEWER WORK

Alberta Journal of Educational Research  
Applied Psycholinguistics  
Applied Psychological Measurement  
Canadian Journal of Education  
Canadian Journal of Program Evaluation  
Canadian Modern Language Review  
Diagnostica  
Educational Testing Service  
International Journal of Testing  
Journal of Educational and Behavioral Statistics  
Journal of Educational Measurement  
Language Assessment Quarterly  
Measurement: Interdisciplinary Research and Perspectives  
Methodology  
Multivariate Behavioral Research  
National Science Foundation  
Organizational Research Methods  
Psychological Methods  
Psychology Science Quarterly  
Psychometrika  
Social Sciences and Humanities Research Council  
Studies in Educational Evaluation  
Zeitschrift für Pädagogik

(i) NATIONAL AND INTERNATIONAL COMMITTEE WORK

2008 – 2011 Bradley Hanson Award for Contributions to Educational Measurement (currently Chair). Awarded annually by the National Council on Measurement in Education (NCME).

2008 – 2011 AERA Outstanding Quantitative Dissertation Award (Member). Awarded annually by the American Educational Research Association (AERA). Leader: Sherri Miller, ACT.

since 2009 Methodological Working Group for the Assessment and Teaching of 21<sup>st</sup> Century Skills (Member) sponsored by CISCO, INTEL, and Microsoft. Leader: Mark Wilson, BEAR Center, University of California at Berkeley.

since 2009 Technical Advisory Board of the Diagnostic E-Learning Trajectories Approach (DELTA) Applied to Rational Number Reasoning for Grades 3-8 (Member). PIs: Jere Confrey, Friday Institute for Educational Innovation, North Carolina State University.

since 2008 Assessment Group for Games-based Learning and Civic Engagement (Member). Sponsored by the John D. & Catherine T. MacArthur foundation. Leader: Jim Gee, Arizona State University.

(j) COMMITTEE WORK AT THE UNIVERSITY OF MARYLAND

since 2009 SPARC Committee of the College of Education (Member)

since 2008 Examination Committee (currently Chair)

since 2008 University of Maryland Campus Senate (Senator)

since 2008 Measurement and Statistics Monday Seminar (MSMS) series (Director)

(k) SELECTED PUBLICATIONS WITH PEER-REVIEW

*Books*

1. **Rupp, A. A.**, Templin, J., & Henson, R. J. (in press). *Diagnostic measurement: Theory, methods, and applications*. New York: Guilford Press.
2. Harsch, C., Pant, A., **Rupp, A. A.**, & Köller, O. (in press). *Standard-setting for standards-based tests of English as a first foreign language in Germany*. Münster: Waxmann.
3. **Rupp, A. A.**, Vock, M., Harsch, C., & Köller, O. (2008). *Developing standards-based assessment items for English as a first foreign language: Context, processes, and outcomes in Germany*. Münster: Waxmann.

*Articles in Peer-reviewed Journals*

1. Frey, A., Hartig, J., & **Rupp, A. A.** (2009). An NCME instructional module on booklet designs in large-scale assessments of student achievement: Theory and practice. *Educational Measurement: Issues and Practice*, 28(3), 39-53.
2. **Rupp, A. A.**, & Templin, J. (2009). The (un)usual suspects? A measurement community in search of its identity. *Measurement: Interdisciplinary Research & Perspectives*, 7(2), 115-121.
3. Robitzsch, A., & **Rupp, A. A.** (2009). Impact of missing data on the detection of differential item functioning: The case of Mantel-Haenszel and logistic regression analysis. *Educational and Psychological Measurement*, 69, 18-34.
4. Shaffer, D. W., Hatfield, D., Svarovsky, G. N., Nash, P., Nulty, A., Bagley, E., Franke, K., **Rupp, A. A.**, & Mislevy, R. J. (in press). Epistemic network analysis: A prototype for 21<sup>st</sup> century assessment of learning. *The International Journal of Learning and Media*.
5. Kunina, O., **Rupp, A. A.**, & Wilhelm, O. (in press). A practical illustration of multidimensional diagnostic skills profiling: Comparing results from confirmatory factor analysis and diagnostic classification models. *Studies in Educational Evaluation*.
6. Pant, H. A., **Rupp, A. A.**, Tiffin-Richards, S., & Köller, O. (in press). Validity issues in standard-setting studies. *Studies in Educational Evaluation*.
7. **Rupp, A. A.**, & Templin, J. (2008). Unique characteristics of cognitive diagnosis models: A comprehensive review of the current state-of-the-art. *Measurement: Interdisciplinary Research & Perspectives*, 6, 219-262.
8. **Rupp, A. A.** (2008). Lost in translation? Meaning and decision making in actual and possible worlds. *Measurement: Interdisciplinary Research & Perspectives*, 6, 117-123.
9. **Rupp, A. A.**, & Templin, J. (2008). The effects of Q-matrix misspecification on parameter estimates and classification accuracy in the DINA model. *Educational and Psychological Measurement*, 68, 78-96.
10. Lesaux, N. K., **Rupp, A. A.**, & Siegel, L. S. (2007). Growth in reading skills of children from diverse linguistic backgrounds: Findings from a 5-year longitudinal study. *Journal of Educational Psychology*, 99, 821-834.
11. **Rupp, A. A.** (2007). The answer is in the question: A guide for describing and investigating the conceptual foundations and statistical properties of cognitive psychometric models. *International Journal of Testing*, 7, 95-125.

12. Ferne, T., & **Rupp, A. A.** (2007). A synthesis of 15 years of research on DIF in language testing: Methodological advances, challenges, and recommendations. *Language Assessment Quarterly*, 4, 113-148.
13. **Rupp, A. A.**, Lesaux, N. K., & Siegel, L. S. (2006). Meeting expectations? Empirical investigations of a standards-based assessment of reading comprehension. *Educational Evaluation and Policy Analysis*, 28, 315-333.
14. **Rupp, A. A.**, Leucht, M., & Hartung, R. (2006). Die Kompetenzbrille aufsetzen: Verfahren zur multiplen Klassifikation von Lernenden für Kompetenzdiagnostik in Unterricht und Testung [Through the competency glasses: Methods for multiple classifications of learners in teaching and testing for the purpose of competency diagnosis]. *Unterrichtswissenschaft*, 34, 195-219.
15. **Rupp, A. A.**, Ferne, T., & Choi, H. (2006). How assessing reading comprehension with multiple-choice questions shapes the construct: A cognitive processing perspective. *Language Testing*, 23, 441-474.
16. **Rupp, A. A.**, & Zumbo, B. D. (2006). Understanding parameter invariance in unidimensional IRT models. *Educational and Psychological Measurement*, 66, 63-84.
17. **Rupp, A. A.** (2005). Quantifying subpopulation differences for a lack of invariance using complex examinee profiles: An exploratory multi-group approach using functional data analysis. *Educational Research and Evaluation*, 11, 71-98.
18. Montgomery, C., & **Rupp, A. A.** (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education*, 28, 458-486.
19. **Rupp, A. A.**, & Zumbo, B. D. (2004). A note on how to quantify and report whether IRT parameter invariance holds: When Pearson correlations are not enough. *Educational and Psychological Measurement*, 64, 588-599.
20. **Rupp, A. A.**, Dey, D. K., & Zumbo, B. D. (2004) To Bayes or not to Bayes, from whether to when: Applications of Bayesian methodology to modeling. *Structural Equation Modeling*, 11, 424-451.
21. **Rupp, A. A.** (2003). Item response modeling with BILOG-MG and MULTILOG for Windows. *International Journal of Testing*, 3, 365-384.
22. **Rupp, A. A.**, & Zumbo, B. D. (2003). Which model is best? Robustness properties to justify model choice among unidimensional IRT models under item parameter drift. *The Alberta Journal of Educational Research*, 49, 264-276.
23. **Rupp, A. A.** (2002). Feature selection for choosing and assembling measurement models: A building-block-based organization. *International Journal of Testing*, 2, 311-360.
24. **Rupp, A. A.**, Garcia, P., & Jamieson, J. (2001). Combining multiple regression and CART to understand difficulty in second language reading and listening comprehension test items. *International Journal of Testing*, 1, 185-216.

### Articles under Review in Peer-reviewed Journals

1. **Rupp, A. A.**, Gushta, M., Mislevy, R. J., & Shaffer, D. W. (2008). *Evidence-centered design of epistemic games: Measurement principles for complex learning environments*. Manuscript under review.
2. Mislevy, J., & **Rupp, A. A.** (2008). *Using item response theory in survey research: Accommodating complex assessment and sampling designs*. Manuscript under review.
3. Choi, J., Kim, S., & **Rupp, A. A.** (2008). *Estimating structural equation models within a Bayesian framework: A concrete example of a Markov-chain Monte Carlo method*. Manuscript under review.
4. Gorin, J. S., **Rupp, A. A.**, & Svetina, D. (2008). *An HLM analysis of reading comprehension item difficulty factors*. Manuscript under review.
5. Templin, J., Ahmed, M., Henson, R., **Rupp, A. A.**, & Jang, E. (2008). *Diagnostic models for nominal response data*. Manuscript under review.
6. **Rupp, A. A.**, & Harsch, C. (2008). *Designing, implementing, and scaling level-specific writing tasks linked to the CEFR*. Manuscript under review.

### Book Chapters

1. **Rupp, A. A.** (in development). Clustering and classification. In T. Little (Ed.), *Oxford handbook of quantitative methods*. New York: Oxford University Press.
2. **Rupp, A. A.** (in press). Psychological vs. psychometric dimensionality in diagnostic language assessments: Subscore issues in multidimensional measurement theory. In J. Sabatini & E. R. Albro (Eds.), *Assessing reading in the 21<sup>st</sup> century: Aligning and applying advances in the reading and measurement sciences*. New York: Rowan & Littlefield Education.
3. Mislevy, J., Stapleton, L., & **Rupp, A. A.** (in press). Sampling considerations and statistical accommodations for large-scale studies of student achievement. In M. Simon, K. Ercikan, & M. Rousseau (Eds.), *An international handbook for large-scale assessments*. Publisher to be determined.
4. **Rupp, A. A.**, Oehler, R., Vock, M., & Leucht, M. (in press). The structure and empirical characteristics of the standard-setting item pool. In C. Harsch, A. Pant, A. A. Rupp, & O. Köller (Eds.), *Standard-setting for standards-based tests of English as a first foreign language in Germany*. Münster: Waxmann.
5. Templin, J., & **Rupp, A. A.** (in press). On the origins of a statistical species: The evolution of diagnostic classification models within the psychometric taxonomy. In G. Macready & G. Hancock (Eds.), *A Festschrift in Honor of C. Mitchell Dayton*. Publisher to be determined.
6. **Rupp, A. A.**, & Mislevy, R. J. (2007). Cognitive foundations of structured item response theory models. In J. Leighton & M. Gierl (Eds.), *Cognitive diagnostic assessment in education: Theory and applications* (pp. 205-241). Cambridge: Cambridge University Press.
7. **Rupp, A. A.**, & Vock, M. (2007). National educational standards in Germany: Methodological challenges for developing and calibrating standards-based tests. In D. Waddington, P. Nentwig, & S. Schanze (Eds.), *Making it comparable: Standards in science education* (pp. 173-198). Münster: Waxman.
8. Zumbo, B. D., & **Rupp, A. A.** (2004). Responsible modeling of measurement data for appropriate inferences: Important advances in reliability and validity theory. In D. Kaplan (Ed.), *Handbook of quantitative methodology for the social sciences* (pp. 73-92). Newbury Park, CA: Sage Press.

### *Papers in National or International Conference Proceedings*

1. **Rupp, A. A.**, Choi, Y., Gushta, M., Mislevy, R. J., Bagley, E., Nash, P., Hatfield, D., Svarowski, G., & Shaffer, D. (2009). Modeling learning progressions in epistemic games with epistemic network analysis: Principles for data analysis and generation. *Proceedings from the Learning Progressions in Science Conference* held in Iowa City, IA, June 24-26. Available online at <http://www.education.uiowa.edu/projects/leaps/>

### *Technical Reports*

1. **Rupp, A. A.** (2005). *Investigating the psychometric and inferential properties of the Intercultural Living and Working Inventory: Challenges, findings, and recommendations* (Technical Report). Ottawa, ON: Canada Foreign Services Institute.

### *Book Reviews*

1. Koran, J., Kohli, N., & **Rupp, A. A.** (in press). Improving Testing: Applying Process Tools and Techniques to Assure Quality [Book Review]. *Journal of Educational Measurement*.
2. **Rupp, A. A.**, & Böhme, K. (2008). Handbook of test development [Book review]. *International Journal of Testing*, 8, 111-125.
3. **Rupp, A. A.** (1999). Statistics for corpus linguistics [Book review]. *Computational Linguistics*, 25, 452.

### *Encyclopedia Entries*

1. Sweet, S., & **Rupp, A. A.** (in press). Comparing groups with multiple independent variables. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics*. New York: Wiley.
2. Sweet, S., & **Rupp, A. A.** (in press). Comparing groups with multiple dependent variables. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics*. New York: Wiley.
3. Gushta, M. & **Rupp, A. A.** (in press). Reliability. In N. Salkind (Ed.), *Encyclopedia of research design*. Thousand Oaks, CA: Sage.
4. Mislevy, J., & **Rupp, A. A.** (in press). Concurrent and predictive validity. In N. Salkind (Ed.), *Encyclopedia of research design*. Thousand Oaks, CA: Sage.
5. Walk, M., & **Rupp, A. A.** (in press). Pearson product-moment correlation coefficient. In N. Salkind (Ed.), *Encyclopedia of research design*. Thousand Oaks, CA: Sage.
6. **Rupp, A. A.** (2006). Cognitive psychometric assessment. In N. Salkind (Ed.), *Encyclopedia of measurement and statistics* (Vol. 1, pp. 163-164). Thousand Oaks, CA: Sage.
7. **Rupp, A. A.** (2006). Parameter invariance. In N. Salkind (Ed.), *Encyclopedia of measurement and statistics* (Vol. 2, pp. 733-736). Thousand Oaks, CA: Sage.
8. **Rupp, A. A.**, & Pant, A. (2006). Validity theory. In N. Salkind (Ed.), *Encyclopedia of measurement and statistics* (Vol. 3, pp. 1032-1035). Thousand Oaks, CA: Sage.
9. **Rupp, A. A.** (2005). Maximum likelihood item response theory estimation. In B. Everitt & D. Howell (Eds.), *Encyclopedia of statistics in behavioral science*. New York: Wiley.

(I) SELECTED PRESENTATIONS WITH PEER-REVIEW

*Presentations at National and International Conferences with Peer-review*

1. **Rupp, A. A.**, Gushta, M., Thies, M.-C., Choi, Y.-Y., Mislevy, R. J., Shaffer, D., Bagley, E., Hatfield, D., & Nash, P. (2009, June). *Representing learning progressions in epistemic games: Statistical challenges, innovations, and solutions*. Presented at the Learning Progressions in Science (LeaPS) conference, Iowa City, IO.
2. Kunina, O., Wilhelm, O., & **Rupp, A. A.** (2009, April). Validity of proficiency profiles in arithmetic ability based on cognitive diagnosis models. Presented at the annual meeting of the American Educational Research Association (AERA), SIG: Cognition & Assessment, San Diego, CA.
3. **Rupp, A. A.** (2009, April). *Software for calibrating diagnostic classification models: An overview of the current state-of-the-art*. Organizer and moderator of symposium for the SIG: Cognition & Assessment at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
4. Zhang, T., & **Rupp, A. A.** (2009, April). *Assessing the model fit of cognitive diagnosis models through Bayesian methods: A simulation study*. Presented at the annual meeting of the National Council for Measurement in Education (NCME), San Diego, CA.
5. Kohli, N., Koran, J., & **Rupp, A. A.** (2009, April). *An alternative comparison of item and person statistics based on item response theory versus classical test theory*. Presented at the annual meeting of the National Council for Measurement in Education (NCME), San Diego, CA.
6. **Rupp, A. A.** (2009, April). *Interesting applications of statistical and psychometric models*. Presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
7. **Rupp, A. A.** (2009, April). *IRT applications*. Presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
8. **Rupp, A. A.** (2009, April). *Test speededness and consequences*. Presented at the annual meeting of the National Council for Measurement in Education (NCME), San Diego, CA.
9. Kunina, O., Wilhelm, O., & **Rupp, A. A.** (2008, August). *Modeling multidimensional structure with diagnostic classification models and confirmatory factor analysis models*. Presented at the bi-annual Fourth Biennial Joint EARLI / Northumbria Assessment Conference, Berlin / Potsdam, Germany.
10. Kunina, O., **Rupp, A. A.**, & Wilhelm, O. (2008, July). *Convergence of skill profiles for cognitive diagnosis models and other multidimensional scaling approaches: An empirical illustration with a diagnostic mathematics assessment*. Presented at the annual meeting of the Psychometric Society, Durham, NH.
11. Zhang, T., & **Rupp, A. A.** (2008, July). *Sensitivity of parameter recovery and classification accuracy for cognitive diagnosis models for prior specification under a Bayesian estimation framework*. Presented at the annual meeting of the Psychometric Society, Durham, NH.
12. **Rupp, A. A.** (2008, March). *Methodological versus explanatory power in cognitively diagnostic assessment*. Presented at the annual meeting of the American Educational Research Association (AERA), New York.
13. Harsch, C., **Rupp, A. A.**, Oehler, R., & Martin, G. (2008, March). *Rating quality of writing tasks linked to the CEFR: Results from generalizability and facets analyses*. Presented at the annual meeting of the American Educational Research Association (AERA), New York.

14. Gorin, J.S., **Rupp, A. A.**, & Svetina, D. (2007, March). *An HLM analysis of reading comprehension item difficulty factors*. Presented at the annual meeting of the National Council on Measurement in Education (NCME).
15. Böhme, K, & **Rupp, A. A.** (2008, March). *Diagnostic assessment of orthographic competence in a large-scale assessment*. Presented at the annual meeting of the American Educational Research Association (AERA), New York.
16. Templin, J., Ahmed, M., Henson, R., **Rupp, A. A.**, & Jang, E. (2008, March). *Diagnostic models for nominal response data*. Presented at the annual meeting of the National Council on Measurement in Education (NCME), New York.
17. **Rupp, A. A.** (2007, April). *Unique characteristics of cognitive diagnosis models*. Presented as part of the symposium 'Fundamental characteristics of models for skills assessment' at the annual meeting of the National Council on Measurement in Education (NCME), Chicago, IL.
18. **Rupp, A. A.** (2007, April). *Challenges for and benefits of applying cognitive diagnosis models in practice*. Presented at the annual meeting of the National Council on Measurement in Education (NCME), Chicago, IL.
19. **Rupp, A. A.**, & Templin, J. (2006, July). *The sensitivity of models for cognitive diagnosis to misspecifications of the Q-matrix*. Presented at the meeting of the Society for Multivariate Analysis in Behavioral Science (SMABS), Budapest, Hungary.
20. **Rupp, A. A.**, & Robitzsch, A. (2006, July). *The impact of missing data on the detection of differential item functioning*. Presented at the meeting of the Society for Multivariate Analysis in Behavioral Science (SMABS), Budapest, Hungary.
21. **Rupp, A. A.**, Choi, H., & Ferne, T. (2006, April). *Integration of psychometric and cognitive information into differential item functioning (DIF) analyses: Impact of imputation methods and a cognitive approach to predicting DIF in SAIP reading comprehension items*. Presented at the annual meeting of the National Council on Measurement in Education (NCME), San Francisco, CA.
22. **Rupp, A. A.**, & Lesaux, N. (2005, April). *Construct validity of state-standards reading assessment: A 5-year longitudinal study*. Presented at the annual meeting of the American Educational Research Association (AERA), Montréal, QC.
23. **Rupp, A. A.** (2005, April). *Methodological considerations and challenges in test adaptation and test translation processes: A discussion*. Presented at the annual meeting of the National Council on Measurement in Education (NCME), Montréal, QC.
24. Ferne, T., & **Rupp, A. A.** (2005, July). *Methods and findings for differential functioning of language assessments*. Presented at the Language Testing Research Colloquium (LTRC), Ottawa, ON.
25. **Rupp, A. A.**, & Watermann, R. (2005, April). *Item, Examinee, and Context Contributions to DIF in the German TOSCA Study*. Presented at the annual meeting of the American Educational Research Association (AERA), Montréal, QC.
26. **Rupp, A. A.**, & Montgomery, C. (2005, April). *Differential functioning of two measures of stress and problem-solving for Francophone teacher-education students in Canada*. Presented at the annual meeting of the American Educational Research Association (AERA), Montréal, QC.
27. **Rupp, A. A.**, & Lesaux, N. (2005, April). *Construct validity of state-standards reading assessment: A 5-year longitudinal study*. Presented at the annual meeting of the American Educational Research Association (AERA), Montréal, QC, Canada.

28. **Rupp, A. A.** (2004, October). *A framework for describing and investigating the conceptual foundations and statistical properties of cognitive psychometric models*. Presented at the 4<sup>th</sup> Spearman Conference at ETS, Philadelphia, PA.
29. **Rupp, A. A.** (2004, July). *Analytical, numerical, and visual investigations of parameter invariance in IRT models*. Presented at the 24<sup>th</sup> biannual meeting of the Society for Multivariate Analysis in Behavioral Science (SMABS), Jena, Germany.
30. **Rupp, A. A.** (2004, July). *An exploratory multi-group approach for carving out differential performance profiles within an IRT metric*. Presented at the 24<sup>th</sup> biannual meeting of the Society for Multivariate Analysis in Behavioral Science (SMABS), Jena, Germany.
31. **Rupp, A. A.** (2004, April). *Investigating the statistical properties of a novel exploratory methodology for differentiating between performance profiles of diverse learner groups*. Paper presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
32. **Rupp, A. A.** (2004, April). *Conceptual and statistical issues in understanding and utilizing DIF for substantive inferences*. Presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
33. **Rupp, A. A., & Zumbo, B. D.** (2003, April). *Bias coefficients for lack of invariance in basic unidimensional IRT models*. Presented at the annual meeting of the National Council for Measurement in Education (NCME), Chicago, IL.
34. **Rupp, A. A., Koh, K., & Zumbo, B. D.** (2003, April). *What is the impact on exploratory factor analysis results of a polychoric correlation matrix from LISREL/PRELIS and EQS when some respondents are not able to follow the rating scale?* Presented at the annual meeting of the American Educational Research Association (AERA), Chicago, IL.

#### *Invited Seminars & Presentations*

1. **Rupp, A. A., Choi, Y.-Y., Gushta, M., Mislevy, R. J., Thies, M.-C., Bagley, E., Hatfield, D., Nash, P., & Shaffer, D.** (2009, May). *Statistical research for data structures from epistemic games: A brainstorm of ideas*. Presented at the third meeting of the Assessment Group for Sociocultural and Games-based Learning sponsored by the John D. and Catherine T. MacArthur foundation, Phoenix, AZ.
2. **Rupp, A. A.** (2009, May). *Strategies for successful collaboration*. Panel member in the opening panel of the 2009 College of Education Graduate Student Research Conference, University of Maryland, College Park, MD.
3. **Rupp, A. A.** (2008, April). *Psychological vs. psychometric dimensionality in diagnostic language assessments: Challenges for integrated assessment systems*. Invited presentation at the conference entitled Reading in the 21<sup>st</sup> Century co-sponsored by ETS and IES, Philadelphia, PA.
4. **Rupp, A. A.** (2007, November). *Current issues in second language assessment: Lessons from large-scale contexts about bridging theoretical desiderata and practical resource constraints*. Invited presentation at the International Research Symposium on Chinese Language Education and Teacher Development, Shanghai, China.
5. **Rupp, A. A.** (2007, August). *Cognitive diagnostic assessment and cognitive diagnosis models: Theoretical potentials and practical challenges*. Invited seminar at the Graduate School for Educational Measurement at the Max-Planck Institute for Educational Research, Berlin, Germany.

6. **Rupp, A. A.** (2007, April). *Consensual standard-setting methods and empirical psychometric approaches to the setting of cut-scores*. Invited presentation at the meeting of the Methodological Research Group Germany, Austria, Switzerland, and Luxemburg (DACHL), Berlin.
7. **Rupp, A. A.** (2005, February). *Hunting the ghost in the machine: General and cognitive psychometric models for modeling and understanding response processes for language tests*. Invited seminar at the Max-Planck Institute for Educational Research, Berlin, Germany.
8. **Rupp, A. A.** (2004, July). *Parameter invariance: Statistical approaches to modeling and understanding a fundamental property of measurement*. Invited seminar at the Max-Planck Institute for Educational Research, Berlin, Germany.

#### *Workshops*

1. de la Torre, J., & **Rupp, A. A.** (2009, July). *Cognitive diagnosis models: Taking the temperature of the current state-of-the-art and charting out the future*. Co-director of working group held at the Statistical and Applied Mathematical Science Institute (SAMSI), Research Triangle Park, NC.
2. **Rupp, A. A.** (2009, May). *Diagnostic measurement: Theory, methods, and applications*. Two-day workshop held at the University of Maryland, College Park, MD.
3. **Rupp, A. A.** (2007, March). *The role of basic statistics in test development and proficiency scaling*. Workshop held at the Centre Internationale d'Études Pédagogiques (CIEP), Sèvres, France.
4. Douglas, J., Tatsuoka, K., Roussos, L., de la Torre, J., Tatsuoka, C., Chang, H., & **Rupp, A. A.** (2005, April). *Latent variable models for cognitive diagnosis*. Workshop presented at the annual meeting of the National Council on Measurement in Education (NCME), Montréal, QC, Canada.
5. **Rupp, A. A.** (2002 – 2003). *Statistical power and sample size determination for study design*. Workshop held repeatedly at the Vancouver General Hospital, Vancouver, BC, Canada.
6. **Rupp, A. A.** (2002). *Model selection for data analysis*. Workshop held at the Vancouver General Hospital, Vancouver, BC, Canada.
7. **Rupp, A. A.** (2001 – 2003). *Hypothesis tests: Important tools for decision-making in statistical inference*. Workshop held repeatedly at the Vancouver General Hospital, Vancouver, BC, Canada.
8. **Rupp, A. A.** (2001 - 2003). *Confidence intervals: Important tools for decision-making in statistical inference*. Workshop held repeatedly at the Vancouver General Hospital, Vancouver, BC, Canada.

(m) PROFESSIONAL DEVELOPMENT

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|----------------|---|
| October 2009   | Participated in the workshop <i>Computer games, simulations, and education</i> sponsored by the Committee on Learning Science of the National Academies, Washington, D.C.   |
| August 2009    | Participated in the workshop <i>Collaboration using the ELMS blackboard</i> sponsored by the Office of Information Technology, University of Maryland, College Park, MD.  |
| November 2008  | Participated in the workshop <i>Value-added Models</i> co-sponsored by the National Academy of Education and the National Research Council's (NRC) Board on Testing and Assessment, Washington D.C.                                   |
| September 2008 | Participated in the workshop <i>Educational Testing in America: State Assessments, Achievement Gaps, National Policy and Innovations</i> co-sponsored by the Educational Testing Service (ETS) and the College Board, Washington D.C. |

(n) SIGNATURE



(André A. Rupp)

Date: October 4, 2009