## **CURRICULUM VITAE**

# WILLIAM D. SCHAFER

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### PERSONAL INFORMATION

Date of Birth: March 8, 1942 Place of Birth: Newburgh, NY

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## **EDUCATIONAL BACKGROUND**

## **Degrees**

Ed.D. University of Rochester, Rochester, NY
Educational Measurement, Statistics, and Research (1969)

M.A. University of Rochester, Rochester, NY Mathematics Education (1965)

B.A. University of Rochester, Rochester, NY Psychology/Mathematics (1964)

### **Workshops Attended**

Use of National Center for Education Statistics Databases for Research and Policy, National Center for Education Statistics, August 1-5, 1994, Madison, WI.

Advanced Studies on the Use of National Assessment of Educational Progress Databases for Research and Policy, National Center for Education Statistics, August 26-29, 1996, Washington, DC.

### **Certificate Held**

Permanent New York State Teacher Certificate: Secondary Mathematics

### PROFESSIONAL WORK EXPERIENCE

- 9/01 present Consultant, Beta Consulting, Inc. and Independently
- 9/00 present Affiliated Professor, Maryland Assessment Research Center for Education Success, Department of Measurement, Statistics, and Evaluation, College of Education, University of Maryland, College Park, MD
- 8/00 present Associate Professor Emeritus, Department of Measurement, Statistics, and Evaluation, College of Education, University of Maryland, College Park, MD
- 7/00 6/04 Assistant Director, Maryland Assessment Research Center for Educational Success
- 9/97 8/99 State Director of Student Assessment, Maryland State Department of Education (MSDE), Baltimore, Maryland (full-time through contract between MSDE and UMCP)
- 8/73 7/00 Associate Professor, Department of Measurement, Statistics, and Evaluation,
  College of Education, University of Maryland, College Park,
  Maryland (UMCP)
- Summer, 1997 Principal Investigator, On-Line Refereed Electronic Journal, ERIC Clearinghouse on Assessment and Evaluation through Catholic University of America, \$11,000.
- Summer, 1996 Support (50%) through Thompson, Derek, Department of Geography Fund for the improvement of postsecondary Education grant on computer applications in geography instruction
- 10/95 9/96 Project Director. Identify Effective Schools and Reasons for Their Effectiveness, Maryland State Department of Education. \$100,000.
- Summer, 1995 Support (25%) through Fox, N. A. National Institutes of Health grant number HD17899.
- 3/95 2/96 Project Investigator. Project WS: Effects of State-Wide Systemic Reforms on School-Level Practices and Outcomes in Reading. National Reading Research Center; John T. Guthrie, Principal Investigator; U. S. Department of Education, Office of Educational Research and Improvement award number RR2291311208564.
   \$18,122.
- Summer, 1994 Support (25%) through Fox, N. A. National Institutes of Health grant number HD17899
- Summer, 1994 Support (50%) through Fox, N. A. National Institutes of Health grant number HD26728
- Summer,1993 Support (50%) through Fox, N. A. National Institutes of Health grant number HD17899
- 7/92 6/93 Project Director. Evaluation of Technical Preparation Programs in Maryland. Division of Career and Technology Education, Maryland State Department of Education contract number 09.02. \$72.688.

- 3/92 4/93 Project Investigator. Project C: Improving Instruction and Learning for At-Risk Children through Performance-Based Reading Assessment. National Reading Research Center; John T. Guthrie, Principal Investigator; U. S. Department of Education, Office of Educational Research and Improvement award number 117A20007. \$35,253.
- Summer,1992 Support (60%) through Fox, N. A. National Institutes of Health grant number HD17899.
- Analysis of Multiple-Choice Tests. United States Government contract number 91-M750000-920. \$759.29.
- Summer,1990 Support (100%) through Guthrie, J. T. Exxon Foundation grant on Minority Reading Achievement, Center for Educational Research and Development.
- 7/88 12/88 Acting Chairperson, Department of Measurement, Statistics, and Evaluation
- 7/85 6/86 Acting Assistant Provost for Research, Division of Human and Community
  Resources, University of Maryland (50%)
- 8/78 7/80 Fellow, Computer Science Center, University of Maryland (25%) 9/69 8/73 Assistant Professor, Department of Measurement, Statistics, and Evaluation
- 9/67 6/69 N.D.E.A. Fellow, Department of Foundations, College of Education,
  University of Rochester, Rochester, New York
- 9/65 6/67 Teacher, Department of Mathematics, West Irondequoit Public Schools, Irondequoit, New York

## RESEARCH, SCHOLARLY, AND CREATIVE ACTIVITIES

- Schafer, W. D.; Lissitz, R. W.; Zhu, X.; Zhang, Y.; Hou, X. & Li, Y. (2012). Evaluating Teachers and Schools Using Student Growth Models. *Practical Assessment, Research & Evaluation*, 17(17). Available online: http://pareonline.net/getvn.asp?v=17&n=17.
- Schafer, W. D. (2011). Developing instructionally sensitive formative assessments. Eleventh Annual Maryland Assessment Conference: Informing the Practice of Teaching Using Formative and Interim Assessment: A Systems Approach, October 20.
- Schafer, W. D., Coverdale, B. J., Luxenberg, H., & Jin, Y. (2011). Quality Control Charts in Large-Scale Assessment Programs. *Practical Assessment, Research & Evaluation*, 16(15). Available online: http://pareonline.net/getvn.asp?v=16&n=15.

- Schafer, W. D. & Hou, X. (2011). Test Score Reporting Referenced to Doubly-Moderated Cut Scores Using Splines. *Practical Assessment, Research & Evaluation*, 16(13). Available online: http://pareonline.net/getvn.asp?v=16&n=13.
- Schafer, W. D. (2011). Aligned by design: A process for systematic alignment of assessments to educational domains. In Schraw, G., & Robinson, D. R. (Eds.). Assessment of higher order thinking skills (pp. 395-418). New York, NY: Information Age Publishers.
- Schafer, W. D., Coverdale, B., Luxenberg, H., & Jin, Y. (2011). *Quality Control Charts in Large-Scale Assessment Programs*. National Council on Measurement in Education Convention, New Orleans, April 10.
- Schafer, W. D. (2010). Review [of The California Measure of Mental Motivation]. In R. A. Spies, J. F. Carlson, and K. F. Geisinger (Eds.), *The eighteenth mental measurements yearbook* (pp. 89-90). Lincoln, NE: Buros Institute of Mental Measurements.
- Schafer, W. D. (2010). Review [of The Wide Range Achievement Test Fourth Edition Progress Monitoring Version]. In R. A. Spies, J. F. Carlson, and K. F. Geisinger (Eds.), *The eighteenth mental measurements yearbook* (pp. 722-724). Lincoln, NE: Buros Institute of Mental Measurements.
- Schafer, W. D. (2010). *Remarks on evolving testing programs*. National Council on Measurement in Education Conference, Denver, May 2.
- Schafer, W. D., Wang, J. and Wang, V. (2009). Validity in action: State assessment validity evidence for compliance with NCLB. In R. W. Lissitz (Ed.) *The concept of validity* (pp. 173-193). Charlotte, NC: Information Age.
- Schafer, W.D. (2009). Workshop on Blueprints for Statewide Assessments, New Mexico State Department of Education, 11/19.
- Schafer, W. D. and Lissitz, R. W. (2009). *Alternate assessments based on alternate achievement standards*. Baltimore: Brookes Publishing.
- Hall, S. E., Kehe, M. D. and Schafer, W. D. (2009). The alternate Maryland school assessment. In W. D. Schafer & R. W. Lissitz (Eds.) Alternate assessments based on alternate achievement standards (pp. 289-220). Baltimore: Brookes Publishing.
- Schafer, W. D. (2009). Principles unique to alternate assessments. In W. D. Schafer & R. W. Lissitz (Eds.). *Alternate assessments based on alternate achievement standards* (pp. 365-368). Baltimore: Brookes Publishing.

- Schafer, W. D. (2009). Studying impacts of assessment and accountability programs. Large-Scale Assessment Conference of the Council of Chief State School Officers, Los Angeles, June 24.
- Knapp, T. R. and Schafer, W. D. (2009). From gain score t to ANCOVA F (and vice versa). *Practical Assessment, Research & Evaluation*, 14(6). Available online: http://pareonline.net/getvn.asp?v=14&n=6.
- Schafer, W. D. (2009). Review [of Employability Competency System Appraisal Test (ECS Appraisal) of the CASAS Comprehensive Adult Student Assessment Systems]. In E. A. Whitfield, R. W. Feller, & C. Wood (Eds.), *A counselor's guide to career assessment instruments* (5<sup>th</sup> ed.) (pp. 137-143). Broken Arrow, OK: National Career Development Association.
- Schafer, W. D., Wang, J. & Wang, V. (2008). Validity in action: State assessment validity evidence for compliance with NCLB. Ninth Annual Maryland Assessment Conference: The Concept of Validity, October 9. Retrievable from http://marces.org/conference/validity/agenda.htm.
- Schafer, W. D. (2008). Setting state standards for school change: A commentary on Arkansas's experience. National Council on Measurement in Education Convention, New York City.
- Schafer, W. D. (2008). Replicated field study design. In J. W. Osborne (Ed.), Best practices in quantitative methods (pp. 147-154). Thousand Oaks, CA: Sage.
- Moody, M., Schafer, W. D., and Seikaly, L. (2007). Implementing cognition-based learning goals in the classroom: The state role. In R. Lissitz (Ed.)

  Assessing and modeling cognitive development in school (pp. 205-216).

  Maple Grove, MN: JAM Press.
- Schafer, W. D. (2007). Review [of The Test of Everyday Attention]. In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.), *The seventeenth mental measurements yearbook* (pp. 788-790). Lincoln, NE: Buros Institute of Mental Measurements.
- Schafer, W. D. (2007). *Principles unique to alternate assessments*. Eighth Annual Maryland Assessment Conference: Alternate Assessment, College Park.
- Hall, S., Kehe, M. & Schafer, W. D. (2007). State exemplar: Maryland's alternate assessment using alternate achievement standards. Eighth Annual Maryland Assessment Conference: Alternate Assessment, College Park.

- Schafer, W. D., Liu, M. & Wang, H (2007). Content and grade trends in state assessments and NAEP. *Practical Assessment Research & Evaluation*, 12(9). Available online: http://pareonline.net/getvn.asp?v=12&n=9.
- Schafer, W. D. (2007). *Multiple measures: The sources matter.* Washington, DC: National Education Association, August 13.
- Schafer, W. D. (2007). The need for assessment limits in describing learning domains. *Measurement*, *4*, 258-261.
- Schafer, W. D., Liu, M. & Wang, H. (2007). *Cross-grade comparisons among statewide assessments and NAEP*. American Educational Research Association convention, Chicago.
- Schafer, W. D. (2007). Comments on setting performance standards for schools in accountability programs: Policy, technical, and operational issues.

  National Council on Measurement in Education convention, Chicago.
- Moody, M. & Schafer, W. D. (2006). Implementing cognition-based learning goals in classrooms: The state role. Conference on Assessing and Modeling Cognitive Development in School: Intellectual Growth and Standard Setting, University of Maryland, College Park, MD, October 19.
- Schafer, W. D. (2006). *Vertical and growth scales*. Council of Chief State School Officers Conference on Large-Scale Assessment, San Francisco.
- Schafer, W. D. (2006). Growth scales as an alternative to vertical scales. *Practical Assessment, Research, and Evaluation*, 11(4). [Available online: http://pareonline.net/getvn.asp?v=11&n=4].
- Schafer, W. D. & Twing, J. S. (2006). Growth scales and pathways. In Lissitz, R. W. (Ed.), Longitudinal and value-added models of student performance. Maple Grove, MN: JAM Press, pp. 321-345.
- Lissitz, R. W., Doran, H., Schafer, W. D., & Wilhoft, J. (2006). Growth modeling, value added modeling, and linking: An introduction. In Lissitz, R. W. (Ed.), Longitudinal and value-added models of student performance. Maple Grove, MN: JAM Press, pp. 1-46.
- Schafer, W. D. (2005). Comments on school-level database design and use.

  National Research Council Symposium on Use of School-Level Data to
  Evaluate Federal Education Programs, Washington, DC, December 9.
  [Available online: http://www7.nationalacademies.org/bota/School-Level%20Data %20Schafer-Remarks.pdf].

- Schafer, W. D. & Twing, J. S. (2005). *Growth scales and pathways*. Conference on Longitudinal Modeling of Student Achievement. University of Maryland, November 8.
- Schafer, W. D. (2005). Review [of the Kaufman lowa Tests of Educational Development, Forms A and B]. In R. A. Spies & B. S. Plake (Eds.), *The sixteenth mental measurements yearbook* (pp. 488-491). Lincoln, NE: Buros Institute of Mental Measurements.
- Schafer, W. D. (2005). Review [of the Science Assessment Series 1 and 2]. In R. A. Spies & B. S. Plake (Eds.), *The sixteenth mental measurements yearbook* (pp. 918-920). Lincoln, NE: Buros Institute of Mental Measurements.
- Schafer, William D. (2005). Technical documentation for alternate assessments. *Practical Assessment Research & Evaluation*, 10(10). [Available online: http://pareonline.net/getvn.asp?v=10&n=10].
- Li, Y. H. & Schafer, W. D. (2005). Increasing the homogeneity of CAT's itemexposure rates by minimizing or maximizing varied target functions while assembling shadow tests. *Journal of Educational Measurement*, *42*(3), 245-269.
- Schafer, W. D. (2005). A reviewer's perspective on NCLB peer review of state assessment systems. Council of Chief State School Officers Conference on Large-Scale Assessment, San Antonio.
- Schafer, W. D., Gagné, P, & Lissitz, R. W. (2005). Resistance to confounding style and content in scoring constructed response items. *Educational Measurement: Issues and Practice*, 24(2), 22-28.
- Schafer, W. D., Papapolydorou, M., Rahman, T., & Parker, L. (2005). *Effects of test administrator characteristics on achievement test scores.* National Council on Measurement in Education Convention, Montreal. ERIC Document ED510145. Available online at ERIC and at http://marces.org/.
- Schafer, W. D. (2005). Criteria for standard setting from the sponsor's perspective. *Applied Measurement in Education*, *18*(1), 61-81. This special issue of *Applied Measurement in Education* won the 2006 American Educational Research Association's Measurement and Research Methodology Division Award for Significant Contribution to Educational Measurement and Research Methodology.
- Schafer, W. D. & Schultz, G. R. (2005). Workshop: Understanding and using Maryland state assessments. 5/2-3, University of Maryland, College Park.

- Li, Y. H. & Schafer, W. D. (2005). Trait parameter recovery using multidimensional computerized adaptive testing in reading and mathematics. *Applied Psychological Measurement*, 29(1), 3-25.
- Schafer, W. D. (2004). Review [of Tindal, G. & Haladyna, T. M. (Eds.), Large-scale assessment programs for all students: Validity, technical adequacy, and implementation. Mahwah, NJ: Lawrence Erlbaum Associates]. Contemporary Psychology, 49, 622-625.
- Schafer, W. D. & Moody, M. (2004). Designing accountability assessments for teaching. *Practical Assessment, Research & Evaluation*, *9*(14). [Available online: http://pareonline.net/getvn.asp?v=9&n=14].
- Schafer, W. D. (2004). Standard setting from the sponsor's perspective. Council of Chief State School Officers Conference on Large-Scale Assessment, Boston.
- Schafer, W. D. (2004). Bonferroni technique. In M. S. Lewis-Beck, A. Bryman & T. F. Liao (Eds.), *The Sage encyclopedia of social science research methods: Vol 1.* Thousand Oaks, CA: Sage Publications, p. 75.
- Schafer, W. D. (2004). Standard setting from a state perspective. National Council on Measurement in Education Convention, San Diego.
- Li, Y. H. & Schafer, W. D. (2004). The context effects of multidimensional CAT on the accuracy of multidimensional abilities and item exposure rates.

  American Educational Research Association Convention, San Diego.
- Schafer, W. D. (2004). Accountability and school improvement: Helping the public understand the statistics behind one state's formula. In Boston, C, Rudner, L. M., Walker, L. J., & Crouch, L. (Eds.) What reporters need to know about test scores. Washington, DC: Education Writers Assoc.
- Ekstrom, Ruth B., Elmore, Patricia B., Schafer, William D., Trotter, Thomas V., & Webster, Barbara (2004). A survey of assessment and evaluation activities of school counselors. *Professional School Counseling*, 8(1), 24-30.
- Schafer, W. D. (2004). Informing test takers. In Wall, J. E. & Walz, G. R. (Eds.) Measuring up: Assessment issues for teachers, counselors, and administrators. Austin, TX: PRO-ED, Inc., pp. 65-78.
- Schafer, W. D. & Moody, M. (2003). *Designing accountability assessments for teaching*. Council of Chief State School Officers Large Scale Assessment Conference, San Antonio.

- Schafer, W. D. (2003). A state perspective on multiple measures in school accountability. *Educational Measurement: Issues and Practice*, 22(2), 27-31.
- Li, Y. H. & Schafer, W. D. (2003). The effect of item selection methods on the variability of CAT's ability estimates when item parameters are contaminated with measurement errors. National Council on Measurement in Education Convention, Chicago.
- Li, Y. H. & Schafer, W. D. (2003). Accuracy of reading and mathematics ability estimates under the shadow-test constraint MCAT. American Educational Research Association Convention, Chicago.
- Li, Y. H. & Schafer, W. D. (2003). *Increasing the Homogeneity of CAT's Item-Exposure Rates by Minimizing or Maximizing Varied Target Functions While Assembling Shadow Tests*. American Educational Research Association Convention, Chicago.
- Lissitz, R. W., Schafer, W. D., & Gagne, P. (2003). *The effect of confounding writing style with writing content in constructed-response items*. National Council on Measurement in Education Convention, Chicago.
- Schafer, W. D. & Moody, M. (2003). Designing accountability assessments for teaching. National Council on Measurement in Education Conference, Chicago.
- Rudner, L. M. & Schafer, W. D. (2002) (Eds.). What teachers need to know about assessment. Washington, DC: National Education Association.
- Lissitz, R. W. & Schafer, W. D. (Eds.) (2002). Assessments in educational reform. Boston: Allyn & Bacon.
- Schafer, W. D. (2002). How can assessment contribute to an educational utopia? In Lissitz, R. W. & Schafer, W. D. (Eds.) Assessments in Educational Reform. Boston: Allyn & Bacon, pp. 80-98.
- Schafer, W. D. & Fine, M. (2002). *Evaluation: Maryland State Improvement Grant*. Beta Consulting, Inc.
- Schafer, W. D. (2002). *The Missouri Assessment Program: An independent evaluation*. Missouri National Education Association.
- Schafer, W.D. and Bourque, M.L. (2002). Workshop on Standard Setting, University of Maryland and National Center for Education Statistics, College Park, MD, 6/13-14.

- Schafer, W. D. (2002). *Multiple measures from a state perspective*. National Council on Measurement in Education Convention, New Orleans. ERIC Document TM 033 801.
- Li, Y. H. & Schafer, W. D. (2002). Accuracy of the generalizability-model standard errors for the percents of examinees reaching standards. National Council on Measurement in Education Convention, New Orleans.
- Schafer, W. D. (2002). Assessment Design for Teaching and Learning.

  Conference on Optimizing State and Classroom Tests: Research for Assessments of Higher Order Reasoning in Subject-Matter Domains, University of Maryland.
- Schafer, W.D. (2002). Workshop on Test Planning and Construction for Elementary and Middle School Assessment and Accountability Programs, Maryland State Department of Education, 4/10-12.
- Schafer, W.D. (2002). Workshop on Test Planning and Construction for High School Assessment and Accountability Programs, Maryland State Department of Education, 2/4-8.
- Guthrie, J. T., Schafer, W. D., & Huang, C. W. (2001). Benefits of opportunity to read and balanced instruction on the NAEP. *Journal of Educational Research*, *94*, 145-162
- Schafer, W. D., Swanson, G., Bené, N., & Newberry, G. (2001). Effects of teacher knowledge of rubrics on student achievement in four content areas. *Applied Measurement in* Education, *14*, 151-170.
- Schafer, W. D. (2001). Replication: A design principle for field research. *Practical Assessment, Research, & Evaluation, 7*(15). [Available online: http://PAREonline.net/getvn.asp?v=7&n=15].
- Powell, D. A. & Schafer, W. D. (2001). The robustness of the likelihood ratio chisquare test for structural equation models: A meta-analysis. *Journal of Educational and Behavioral Statistics*, 26, 105-132.
- Schafer, W. D. (2001). Providing assistance to schools that need it. The Edward F. Reidy, Jr. Interactive Lecture Series, Nashua, NH. October 5.
- Schwarz, R. D., Yen, W. M., & Schafer, W. D. (2001). The challenge and attainability of goals for adequate yearly progress. *Educational Measurement: Issues and Practice*, 20(3), 26-33.
- Schafer, W. D. (2001). Review [of the Vocational Interest Inventory Revised (VII-R)]. In Kapes, J. T. & Whitfield, E. A. (Eds.), *A counselor's guide to*

- career assessment instruments (4<sup>th</sup> ed.) (pp. 303-307). Alexandria, VA: National Career Development Association.
- Elmore, Patricia B., Ekstrom, Ruth B., Hutchinson, Darren, Mastie, Marjorie, O'Rourke, Kathy, Schafer, William, Trotter, Thomas, & Webster, Barbara (2001). Competencies in assessment and evaluation for school counselors. In G. R. Walz & J. C. Bleuer (Eds.), Assessment issues and challenges for the millennium (pp. 95-100). Greensboro, NC: ERIC Counseling and Student Services Clearinghouse.
- Schafer, W. D. (2001). Review [of the Kaufman Test of Educational Achievement]. In J. C. Impara & B. S. Plake (Eds.), *The fourteenth mental measurements yearbook* (pp. 630-632). Lincoln, NE: Buros Institute of Mental Measurements.
- Schafer, W. D. (2001). Review [of the School Function Assessment]. In J. C. Impara & B. S. Plake (Eds.), *The fourteenth mental measurements yearbook* (pp. 1086-1088). Lincoln, NE: Buros Institute of Mental Measurements.
- Guthrie, J. T., Schafer, W. D., Von Secker, C., & Alban, T. (2000). Contributions of instructional practices to reading achievement in a statewide improvement program. *Journal of Educational Research*, 93, 211-225.
- Schafer, W. D. (2000). Implications of GI Forum v. Texas Education Agency for State Assessment Programs. Ohio State Department of Education, Columbus, OH, November 28.
- Schafer, W. D. (2000). Visions of an Assessment Utopia. Colloquium sponsored by the Washington State Office of Public Instruction, Seattle, WA, October 30.
- Schafer, W. D., Yen, S. J., & Rahman, T. (2000). School effects indices: Stability of one- and two-level formulations. *Journal of Experimental Education*, 68, 239-250.
- Schafer, W. D. (2000). GI Forum v. TEA: Observations for states. *Applied Measurement in Education*, 13, 411-418.
- Schafer, W. D. (2000). Visions of an Assessment Utopia. Colloquium sponsored by the Board on Testing and Assessment, National Research Council/National Academy of Sciences, Washington, DC, September 25.
- Schafer, W.D. (2000). Workshop on Test Construction, Construction Specifications Institute, Fairfax, VA, 7/28.

- Schafer, W. D. (2000). Educating applied assessment professionals at the masters level. National Council on Measurement in Education Convention, New Orleans. ERIC Document ED 440 988.
- Schafer, W. D. (2000). *Visions of an assessment utopia*. Conference on Assessments in Educational Reform: Both Means and Ends, University of Maryland.
- Schafer, W. D. (2000). Expert Witness representing Life University on legal issues arising with the Council on Chiropractic Education before the National Advisory Committee on Institutional Quality and Integrity, Office of Postsecondary Education, U. S. Office of Education, May 24.
- Schafer, W. D. (1999). An overview of meta-analysis. *Measurement and Evaluation in Counseling and Development*, 32, 43-61.
- Byrnes, J.P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk-taking: A meta-analysis. *Psychological Bulletin*, *125*, 367-383.
- Schafer, W. D. (1999) Institute presentation for the U. S. Department of Education on Partnerships for Accountability in School Reform, Washington, DC, 9/21.
- Schafer, W.D. (1999). Workshop on Test Construction, Construction Specifications Institute, Alexandria, VA, 7/16.
- Rudner, L. M, & Schafer, W. D. (1999). How to write a scholarly research report. *Practical Assessment, Research & Evaluation*, *6*(13) [Available online: http://ericae.net/pare/getvn.asp?v=6&n=13].
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- Schafer, W. D. (1999). *Using test results for support to educators*. National Conference on Large-Scale Assessment, Snowbird, UT.
- Schafer, W. D. (1999). *Differentiation of schools by successfulness*. (ERIC Document Reproduction Service No. ED 347 416).
- Elmore, P. B., Ekstrom, R. B., Schafer, W. D., Trotter, T. V., & Webster, B. (1999). Essential assessment and evaluation competencies for school counselors. American Counseling Association, San Diego, CA.
- Schafer, W. D. (1999). *The NAEP-Maryland comparison: Thoughts on process and results*. American Educational Research Association Convention, Montreal, Canada.

- Guthrie, J. T., Schafer, W. D., Von Secker, C., & Alban, T. (1999). *Characteristics of schools improving in reading instruction*. American Educational Research Association Convention, Montreal, Canada.
- Schafer, W. D., Swanson, G., Bene, N., & Newberry, G. (1999). Effects of teacher knowledge of rubrics on student achievement. American Educational Research Association Convention, Montreal, Canada. ERIC Document TM 029 774.
- Yen, S. J., Schafer, W. D., & Rahman, T. (1999). School effect indices: Stability of one- and two-level formulations. American Educational Research Association Convention, Montreal, Canada. ERIC Document TM 029 773.
- Schafer, W. D. & Webster, B. (1998). Developing assessment standards for school counselors. In Allen, J. M. (Ed.). *School counseling: New perspectives & practices*. Greensboro, NC: ERIC/CASS, pp. 149-154.
- Darling-Hammond, L., Diez, M. E., Moss, P., Pecheone, R., Pullin, D., Schafer, W. D., & Vickers, L. (1998). The role of standards and assessment: A dialogue. In Diez, M. E. (Ed.). *Changing the practice of teacher education:* Standards and assessment as a lever for change. Washington, DC: AACTE Publications. pp. 11-38.
- Schafer, W. D. (1998). Review [of the Comprehensive Adult Student Assessment System]. In J. C. Impara & B. S. Plake (Eds.), *The thirteenth mental measurements yearbook* (pp. 298-299). Lincoln, NE: Buros Institute of Mental Measurements.
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- Yen, S. J. & Schafer, W. D. (1998). *Overview of MSPAP psychometric analyses*. Maryland Assessment Group Convention, Ocean City, MD.
- Yen, W. & Schafer. W. D. (1998). *Testing issues involving MSPAP*. Maryland Assessment Group Convention, Ocean City, MD.
- Schafer, W.D. (1998). Workshop on Test Construction, Construction Specifications Institute, Alexandria, VA, 7/17.
- Elmore, P. B., Ekstrom, R. B., & Schafer, W. D. (1997). Standards for educational and psychological tests and testing professionals. In R. F. Dillon (Ed.). *Handbook on testing*. Westport, CT: Greenwood Press, pp. 39-64.

- Schafer, W. D. (1997). Classroom assessment. In G. D. Phye (Ed.). *Handbook of academic learning: Construction of knowledge*. San Diego. CA: Academic Press, pp. 513-547.
- Schafer, W. D. (1997). Measurements for research in the helping professions. In L. C. Loesch & N. A. Vacc (Eds.). *Research in counseling and therapy*. Greensboro, NC: ERIC/CASS, pp. 103-105.
- Schafer, W. D. (1997). Selection of higher successfulness and lower successfulness schools. Council of Educational Administrative and Supervisory Organizations of Maryland Invitational Leadership Conference, Baltimore, MD.
- Graham, S., Berninger, V., Weintraub, N., & Schafer, W. D. (1997). Development of handwriting speed and legibility in grades 1-9. *Journal of Educational Research*, 92, 42-52.
- Schafer, W.D. (1997). Workshop -Test-Taker Rights and Responsibilities, University of Maryland Counseling Center, 10/29.
- Schafer, W. D., Guthrie, J. T., & Von Secker, C. (1997). *Achievement change* and reading instructional strategies. National Reading Research Center Reading Research Report.
- Schafer, W.D. (1997). Workshop on Test Construction, Construction Specifications Institute, Alexandria, VA, 7/25.
- Schafer, W. D., Ekstrom, R. and Elmore, P. (1997). Workshop on Assessment and School Counseling, workshop at the American Counseling Association convention, Pittsburgh, 4/4.
- Schafer, W. D. (1997). Selection of higher successfulness and lower successfulness schools. American Educational Research Association Convention, Chicago. ERIC Document ED 408 343 & TM 026 622.
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- Schafer, W. D., Hultgren, F. H., Hawley, W. D., Abrams, A. L., Seubert, C. C., & Mazzoni, S. (1996). *Study of higher-success and lower-success elementary schools*. University of Maryland Report to the Maryland State Department of Education.
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- Yawkey, T. D. & Schafer, W. D. (1973). The Peabody Picture Vocabulary Test and the Wechesler Intelligence Scale employed with low socio-economic black rural school children. Northeastern Educational Research Association--National Council on Measurement in Education Convention, Ellenville, NY.
- Dayton, C. M., Schafer, W. D., & Rogers, B. G. (1973). On appropriate uses and interpretations of power analysis: A comment. *American Educational Research Journal*, 10(3), 231-234.
- Schafer, W. D. and Littlefield, B. (1973). A computer program to provide test analysis including correction-for-guessing scoring where item decoys are heterogeneous. *Educational and Psychological Measurement*, 33, 701-703.

- Schafer, W. D. (1973). Policy-constitution news. *Compass-Points*, January.
- Schafer, W. D. (1972). Policy-constitution news. Compass-Points, September.
- Schafer, W. D. (1972). A computer program to generate reliability indices for composite tests including a cross-validation technique. *Educational and Psychological Measurement*, 32(3), 793-794.
- Schafer, W. D. (1972). Policy committee news. Compass-Points, March.
- Knapp, T. R. & Schafer, W. D. (1971). Two new formulas for F in analysis of covariance for two groups and one covariable. American Educational Research Association Convention, New York City. Research in Education, ERIC Document ED 045 701.
- Boynton, R. M., Schafer, W. D., & Neun, M. E. (1964). Hue-wavelength relation measured by color-naming method for three retinal locations. *Science*, 146(3644), 666-668.

#### Journals Edited

1999-present Co-editor, *Practical Assessment, Research & Evaluation* (a peer-reviewed electronic journal available at PAREonline.net).

1990-93 Measurement and Evaluation in Counseling and Development, three-year appointment (7/1/90 through 6/30/93): v. 23, iss. 2 (July, 1990) through v. 26, iss. 1 (April, 1993).

Lissitz, R. W. & Schafer, W. D. (Eds.). (1993). Mandatory testing: Issues in policy-driven assessment [Special issue]. *Measurement and Evaluation in Counseling and Development*, 26(1).

## **Editorial Board Memberships**

1996-1997 Journal of Counseling Psychology

1996-present Educational and Psychological Measurement

1994-2001 Journal of Experimental Education

1994-present Applied Measurement in Education

1992-1994 Developmental Psychology

1987-present Measurement and Evaluation in Counseling and Development

### PROFESSIONAL ACTIVITIES

American Counseling Association

Advisor to the Joint Committee on Standards for Educational and Psychological Testing, 1994-2000

Representative to the Joint Committee on Testing Practices, 1992-95 Co-Chair, Test Taker's Bill of Rights Committee, 1993-94

Symposium Organizer, Assessment Education of School Counselors, 1995

Organizer and Chair, How to Publish in ACA Journals, 1993

Chair, Council of Journal Editors, 1993

Media Committee, 1993

Representative of the ACA Committee on Testing and of the Association for Assessment in Counseling to the Professionalization Directorate, 1991

Armed Services Vocational Aptitude Battery (ASVAB) Advisory Committee, 1983-84, 1987-89

Research Conference Planning Committee, 1986-87

Governing Council, 1985-86

Board of Directors, 1984-85

Matching Grants Review Committee, 1984-85

Chair, By-Laws Committee, Southern Regional Branch Assembly, 1974-76

## Branch Awards Committee, 1972-73

Association for Assessment in Counseling and Education

Chair; Committee on Assessment Training for School Counselors (joint committee with American School Counselor Association), 1993-1998

Chair, Assessment Training in School Counseling, American Counseling Association Convention, 1991-1994

Chair, Committee on Position Statements and Standards, 1989-90

Co-Chair, Committee on Position Statements and Standards, 1988-89

Chair, Responsibilities of Users of Standardized Tests Statement Review Committee, 1987-88

Executive Council, 1984-86

Past-President, 1982-83

President of the Association, 1981-82

President-Elect, 1980-81

Chair, Committee on Testing, 1979-81 (developed AACE's Statement on Legislation Affecting Testing for Selection in Educational and Occupational Programs)

Representative to the National Consortium on Testing, 1976-80

Treasurer, 1976-78

Treasurer-Elect, 1975-76

Chair, State Divisions Meeting, 1975-76

Coordinator of State Divisions, 1972-76

Membership Chair, 1972-74

Membership Committee, 1971-72

### American Educational Research Association

Discussant, Issues Related to the Teaching of Educational Research, 1999

Discussant, Confidence Intervals and Errors of Measurement, 1998

Division D: Measurement and Research Methodology

Referee, 1983-84, 1986 1990-92, 1996

Awards Competition Judge, 1981-82

Division E, Referee, 1995-96

Discussant, ANOVA, ANCOVA, and Multiple Comparison Procedures, 1995

Discussant, Studies of Classroom Assessment Practices, 1995

Discussant, Who Makes the Grade? Judgments of Student Performance

by Novice Teachers and Principals, 1994

Discussant, Advanced Topics in Meta-Analysis, 1993

Discussant, Significance Testing in a Post-Positivistic Era: Some

Proposed Alternatives with Comments from Journal Editors, 1992

Discussant, Correlation and Regression, 1992

Symposium Organizer, Analyzing NAEP Data with a Focus on Ethnic and

Gender Comparisons, 1991

Ancillary Meeting Chair, Classroom Assessment, 1991.

Discussant, Statistical Tests Under Conditions of Nonnormality and/or Variance Heterogeneity 1990. Discussant, Selected Statistical Topics, 1989 Chair, Tellers Committee, 1989

Symposium Organizer, Data Sets for Statistics Instruction, 1988.

Reactor, Teaching Statistical Methods Classes: Instructional Topics, 1987

Chair, Issues in the Analysis of Correlated Data. 1987

Discussant, Software Evaluations, 1986.

Discussant, Teaching Statistics. 1985

Discussant, The Research Process: Policies and Issues, 1984.

## Special Interest Group: Classroom Assessment

Referee, 1992-93, 1995-97, 2000

Chair Research Awards Committee, 1995-96

Chair, Committee on Advisability of an Annual Award, 1992-94

Founder and initial Chair of the SIG, 1991-92

## Special Interest Group: Educational Statisticians

Discussant, Teaching Educational Statistics, 2000

Referee, 1986, 1988, 1990-95, 1997-98

Nominations Committee, 1995-96

Chair, Nomination and Election Committee, 1990

Chair, Membership Meeting and Invited Address, 1988

President of the SIG, 1987-88

Program Chair, 1986-87

President-Elect, 1986-87

Associate Editor for Statistical Software, Newsletter, 1983-84

### Special Interest Group: Professors of Educational Research

Referee, 1990-91, 1993-94, 1996, 1998

Chair of the SIG, 1992-95

## American Occupational Therapy Foundation

Consultant, 1989-1994

## Association of American Colleges of Teacher Education

Symposium Organizer, Exploring Paradigms for Including Assessment Content in Teacher Education Programs, 1995

Advisory Panel, National Center for Education Statistics, 1982-83

## Association of American Medical Colleges

Consultant, 1971-1982

### **Buros Institute of Mental Measurements**

Kellogg Grant Project on Educational Measurement Competencies of Teachers Advisory Committee, 1991-93

# Central Intelligence Agency Consultant, 1991-1995

## Council of Chief State School Officers

Technical Assistance Consultant, 2002-06

Conference on Large-Scale Assessments

Discussant, Successes, Challenges, and Outcomes of Using Different Approaches to Measure Student Growth for

Accountability and Instruction, 2005

Discussant on Alignment Methods, 2001

Session Organizer and Moderator: More Miss Marple Measurement Moments, 2000

Symposium Co-Organizer and CO-Chair: Miss Marple

Measurement Moments, 1999

Discussant, Case Studies in Performance-Based Assessment for School Reform, 1999

## Construction Specifications Institute

Consultant and Trainer, 1996-2001

## Human Resources Research Organization

NAEP Quality Assurance Panelist, 2002-10

## Joint Committee on Testing Practices

Co-Chair, Test-Taker Rights and Responsibilities Working Group 1993-1999

Understanding Testing Working Group, 1992-95

Representative 1991-92

### Maryland Assessment Consortium

Board of Directors, 1998-01

### Maryland Assessment Group

Discussant, Reliability and Validity Analyses of Maryland State Performance Assessments, 1998

Treasurer, 1991-1999

Panelist, Measurement Issues Related to MSPAP, 1995.

### Maryland Counseling Association

Past-President and Nominations and Elections Chair, 1976-77

President of the Association, 1975-76

President-Elect and Program Chair, 1974-75

Policy-Constitution Chair, 1971-73

Structure and Functions Chair, 1970-71

Maryland Association for Measurement and Evaluation

President of the Association, 1982-84 Membership Chair, 1972-73

## Maryland State Department of Education

The Maryland Assessment Project, (funded by the U. S. Department of Education Goals 2000 Assessment Development and Evaluation Grants Program).

National Psychometric Council, 1999-present

Advisory Board Member, 1995-2001

State Teacher Education Task Force - Phase II: Design and Implementation, 1993-94

Higher Education Representative, Conference on School/University
Partnerships, Maryland School Performance Program, 1990-91
Linking Assessment in Schools and Teacher Education Group, 1990-91
Committee on Data Base, Standards, and Accreditation, 1990-91
Maryland Working Group on Assessing Thinking, 1988-90
State Expert on Characteristics of the Learner, 1989-90
Task Force on Characteristics of the Learner, 1987-89

Maryland State Board for Higher Education

Committee on Higher Education Testing, 1984-85

Minnesota Department of Education Technical Advisory Council, 2003-2009

Missouri National Education Association Evaluator, Missouri Assessment and Accountability Program

## National Assessment of Educational Progress

Reading Framework Redesign Committee Technical Advisory Committee, 2002-05

Foreign Language Framework Development Technical Advisory Committee, 1998-2000

### National Center for Education Statistics

Advisory Panel, Survey on Assessment in Teacher Education (joint with Westat Corporation), 1992-93

### National Council on Measurement in Education

Symposium Discussant, 2007, 2008, 2010

Discussant on Test Accommodations: Methods and Implications, 2005 Symposium Organizer, Educating Assessment Professionals for Applied Settings, 2000

Chair, Ad Hoc Committee on Preservice Teacher Training in Assessment, 1996-97

Professional Responsibilities of Measurement Professionals in Education Committee, 1997-1999

Chair, Ad Hoc Committee on Preservice Teacher Training in Assessment, 1993-97

Symposium Organizer, Test-Taker Rights, 1995

Code of Ethics Ad Hoc Committee, 1992-95

Discussant, Materials and Strategies for Training Teachers about Classroom Assessment, 1994

Discussant, Teacher Assessment Literacy: Development of Training Materials, 1993

Participant, Reactions of the NCME Membership to a Draft NCME Code of Ethics, 1993

Discussant, Survey of Teacher Competencies in Educational Assessment of Students to Inform Training Material Development, 1992

Referee, 1990-1994

Discussant, Factor Analytic Procedures Related to Construct Validity, 1990

Organizer, Teacher Education in Measurement Meeting, 1989, 1990

Co-Chair, Organizing State-Wide Assessment Groups, 1988

Elections Committee, 1986-88

Co-Chair, Committee on Teacher Education in Measurement, 1986-89 Abstracts Editor, 1973-74

### National Institute of Health

The Washington Child Development Seminar

Respondent: Research in Non-Research Settings: Five Strategies for Measuring Change, 1981

Nevada Department of Education Technical Advisory Council, 2003-present

New Mexico Department of Education Technical Advisory Council, 2001-present

Oregon Department of Education Consultant, 2005-06

Puerto Rico Department of Education Technical Advisory Council, 2001-03

Regional Education Service Agency of Appalachian, MD
Validation of Criterion-Referenced Testing Committee, 1990-91

South Carolina Education Oversight Committee Technical Advisory Council, 2009

South Dakota Department of Education

## Technical Advisory Council, 2006-present

Southwestern Educational Research Association Judge, Outstanding Paper Competition, 1995

Tennessee Department of Education
Standard Setting Project Technical Advisory Council, 2003-05

United States Department of Education,

Technical Assistance Specialist, 2005-06 Assessment & Accountability Reviewer, 1999-2001, 2002-10 Title I Assessment Reviewer, 2001-02

University Promotion & Tenure External Reviewer

University of Cincinnati University of Manitoba University of Toronto Wayne State University

Washington State Department of Education Consultant, 1995, 2007-2008

Wyoming Department of Education Consultant, 2002-2003

## **INSTRUCTION AND ADVISING**

## **Courses Taught**

EDMS 410	- Principles	of Testing	and Evaluation

EDMS 451 - Introduction to Educational Statistics

EDMS 465 - Algorithmic Methods in Educational Research

EDMS 489 - Field Experiences in Measurement and Statistics

EDMS 645 - Quantitative Research Methods I

EDMS 646 - Quantitative Research Methods II

EDMS 651 - Intermediate Statistics in Education

EDMS 738 - Seminar in Special Problems in Measurement

EDMS 769L- Measurement Methodology for Program Evaluation

EDMS 769F- Meta-Analysis

EDMS 771 - Design of Experiments

EDMS 779 - Seminar in Applied Statistics

EDMS 780 - Research Methods and Materials

EDMS 798 - Special Problems in Education

EDMS 799 - Master's Thesis Research

EDMS 879 - Doctoral Seminar

### **Theses Directed**

- Powell, Douglas A. *The robustness of the chi-square goodness-of-fit test for structural equations models: A meta-analysis*. Ph.D., University of Maryland, 1998. Results of this study have been published in *Journal of Educational and Behavioral Statistics*.
- Holden-Pitt, Lisa D. Response-confidence and speech-quality ratings as supplements to consonant labeling responses. Ph.D., University of Maryland, 1996.
- Kenyon, Dorry M. Relating scores on multiple-choice tests to verbally-defined proficiency levels through an investigation of the construct representation of test items, Ph.D., University of Maryland, 1995. This dissertation won the 1996-97 Test of English as a Foreign Language (TOEFL) Award for Outstanding Doctoral Research on Second/Foreign Language Testing.
- Jones, Gregory E. The effects of levels of item discrimination, sample size, distribution of category boundaries, and number of categories on item parameter recovery for the graded response latent trait model, Ph.D., University of Maryland, 1994.
- Wang, Yuh-Yin. *Maximum likelihood and minimum distance applied to univariate mixture distributions*, Ph.D., University of Maryland, 1992. Results of this study were presented at the American Educational Research Association Convention, 1993.
- Willhoft, Joseph L. *The effects of mean pattern and non-sphericity on univariate and multivariate analyses for a two-factor, repeated measures design*, Ph.D., University of Maryland, 1988. Results of this study were presented at the American Educational Research Association Convention, 1989.
- Edgar, Suzanne H. *Adjustment procedures for nonresponse bias in mail surveys*. Ph.D., University of Maryland, 1987. Results of this study were presented at the American Educational Research Association Convention, 1988.
- Baum, Susan D. A study of answer-changing behavior on multiple-choice tests. Ph.D., University of Maryland, 1982.
- Jonas, Bruce S. A procedure for establishing placement cutoffs in a sequential series of objective based referenced tests. Ph.D., University of Maryland, 1980.

- Thompson, Marian L. *Predictive validity of subset regression procedures*. Ph.D., University of Maryland, 1979. Results of this study were presented at the American Educational Research Association Convention, 1980.
- Batcher, Mary. An empirical investigation of several multiple comparison techniques. M.A., University of Maryland, 1978.
- Littlefield, Barbara. The effects of corrected-for-guessing and partial information scoring procedures and number of alternatives on reliability, validity, and difficulty in multiple-choice test items. Ph.D., University of Maryland, 1978.
- Romberg, Elaine. The effects of test-taking skills and attitudes on validity of standardized achievement test scores of inner-city children. Ph.D., University of Maryland, 1977.
- Silverman, Jay H. The effects of number anxiety, flexibility, and situational anxiety on achievement in statistics. M.A., University of Maryland, 1975.
- Dworkin, Fay H. An investigation of criterion keying to three types of residuals in order to enhance predictive validity. Ph.D., University of Maryland, 1974.
- Hamilton, Basil L. A Monte-Carlo comparison of parametric and non-parametric uses of a concomitant variable. Ph.D., University of Maryland, 1972. Results of this study have been published in Educational and Psychological Measurement and Journal of the American Statistical Association.
- Campbell, John R. *An evaluation by the use of Monte-Carlo techniques, of nonnormality and nonlinearity on certain tests of nonassociation*. Ph.D., University of Maryland, 1972.

### **AWARDS AND HONORS**

- 2010 Fellow, American Counseling Association, Nominated by the Association for Assessment in Counseling and Education
- 2008 Distinguished Reviewer Award, Buros Institute of Mental Measurements
- 2006 Contributor to a special issue of *Applied Measurement in Education* that won the 2006 American Educational Research Association's Measurement and Research Methodology Division Award for Significant Contribution to Educational Measurement and Research Methodology
- 2001 Citation for Research Merit, American Educational Research Association Classroom Assessment Special Interest Group

- 2000 Conference (Assessments in Educational Reform: Both Means and Ends) at Retirement in Honor of Career, Department of Measurement, Statistics, and Evaluation, College of Education, University of Maryland and Maryland State Department of Education, June 5-6
- 1999 Certificate of Recognition, Association for Assessment in Counseling
- 1998 Certificate of Recognition, Association for Assessment in Counseling
- 1997 Certificate of Recognition, Association for Assessment in Counseling
- 1996 Certificate of Recognition, Association for Assessment in Counseling
- 1995 Certificate of Recognition, Association for Assessment in Counseling
- 1993 Certificate of Recognition, Association for Assessment in Counseling
- 1992 Certificate of Recognition, Association for Assessment in Counseling
- 1990 Certificate of Recognition, Association for Assessment in Counseling
- 1988 Certificate of Appreciation, Association for Assessment in Counseling
- 1985 Certificate of Appreciation, American Counseling Association
- 1982 Honored at Reception as President of Association for Assessment in Counseling, Michigan Association for Assessment in Counseling, Detroit
- 1982 Commendation, Senate Concurrent Resolution No. 524, State of Michigan Legislature
- 1981 Commendation for Participation in the American Counseling Association, Maryland Association for Counseling and Development
- 1980 Certificate of Commendation and Appreciation, Maryland Association for Counseling and Development
- 1976 Outstanding and Distinguished Service Award, Maryland Association for Counseling and Development
- 1975 Commendation for Participation in the American Counseling Association, Maryland Association for Counseling and Development
- 1973 Outstanding and Distinguished Service Award, Maryland Association for Counseling and Development
- 1972 Outstanding and Distinguished Service Award, Maryland Association for Counseling and Development