

VITA
NEAL M. KINGSTON

EDUCATION

Ph.D., Educational Measurement, Teachers College, Columbia University, New York, NY

M.Ed., Educational Measurement, Teachers College, Columbia University, New York, NY

B.A., Liberal Studies (concentrations in Biology & Education), State University of New York, Stony Brook, NY

PROFESSIONAL HISTORY

- 2006-present Associate Professor, Program in Research, Evaluation, Measurement, and Statistics, School of Education, University of Kansas, Lawrence, KS
- 2004- 2006 Vice President - General Manager and Vice President of Research, CTB McGraw-Hill, Monterey, CA
- 1996–2004 Measured Progress (name changed from Advanced Systems), Dover, NH
Senior Vice-President 1997-2004
Vice-President 1996-97
- 1996 Assessment Consultant
- 1993–1995 Associate Commissioner, Office of Curriculum, Assessment, and Accountability, Kentucky Department of Education, Frankfort, KY
- 1991–1993 Assessment Consultant
- 1982–1991 Educational Testing Service, Princeton, NJ:
Executive Director, Workplace Assessment and Training, 1990–91
Director of Graduate Record Examinations Research and New Testing Initiatives, 1989–90
Director of Graduate Record Examinations Research and Test Development, 1987–89
Group Head, School and Higher Education Programs Statistical Analysis, 1983–87
Senior Measurement Statistician, School and Higher Education Programs Statistical Analysis, 1982–87
- 1981–1982 Director of Selection Research, Los Angeles County Department of Personnel, Los Angeles, CA
- 1978–1981 Associate Measurement Statistician, Educational Testing Service, Princeton, NJ
- 1976–1978 Statistics Instructor, Teachers College, Columbia University, New York, NY
- 1974–1976 Teacher, General Science, grades 7 and 9, Yonkers Board of Education, Yonkers, NY

TEACHING

GRADUATE COURSES TAUGHT

Computer-Based Testing (PRE 931, University of Kansas)
Current Issues and Trends in Research, Evaluation, Measurement, and Statistics (PRE 918, University of Kansas)
Educational Measurement (PRE 725, University of Kansas)
Introductory Statistics (Teachers College, California School of Professional Psychology, Trenton State College)
Item Response Theory (Rutgers University)
Meta-Analysis (PRE 812, University of Kansas)
Multivariate Statistics (Rutgers University)

UNDERGRADUATE COURSES TAUGHT

Research Methods (PRE 598, University of Kansas, special course for McNair Scholars Program)

DOCTORAL DISSERTATION COMMITTEES

Beauchamp, Anne; Educational Psychology and Research, 2007-present
Carvajal, Jorge; Educational Psychology and Research, 2007-present
Kim, Sooji; Music Therapy, 2007-2008
Lee, Jae Hoon; Quantitative Psychology, 2007-present
Merrilat, Linda; Educational Technology, 2007-present
Moshirnia, Andrew; Educational Technology, 2007-present
Stevens, Sheridan; Special Education, 2006
Theoharris, Rachelle; Special Education, 2007-present
Wolkowitz, Amanda; Educational Psychology and Research 2007-present

DOCTORAL COMPREHENSIVE EXAMINATION COMMITTEES

Carvajal, Jorge, 2007
Moshirnia, Andrew, 2007
Suh, Hong, , 2007
Wolkowitz, Amanda, 2007

MASTERS THESIS COMMITTEES

Hinojos, Belinda; Counseling Psychology, 2006
Moeder, Michelle; Counseling Psychology, 2007-08
Nash, Brooke; Educational Psychology and Research, 2007
Wu, Yelina Ping; Clinical Child Psychology, 2006-07

TRAINING SESSIONS TAUGHT

Bias and Sensitivity Review
Item Response Theory
Matrix Management
Standard Setting
Test Development

OTHER TEACHING

Grade 9 General Science (Gorton High School, Yonkers, NY)
Grade 7 General Science (Commerce Middle School, Yonkers, NY)

RESEARCH

PUBLICATIONS: REFEREED JOURNALS

1. Kingston, N.M. (submitted). On the reliability of portfolio scores using two different scoring methods and two populations of scorers.
2. Kingston, N.M. (accepted). Comparability of computer- and paper-administered multiple-choice tests for K-12 populations: a synthesis.
3. Kingston, N.M. 1993. Standard setting in compensatory versus non-compensatory licensure testing programs. *CLEAR Exam Review* 4:24-27.
4. Kingston, N.M. and Dorans, N.J. 1985. The analysis of item-ability regressions: an exploratory IRT model fit tool. *Applied Psychological Measurement* 9:281-288.
5. Dorans, N.J. and Kingston, N.M. 1985. The effects of violations of unidimensionality on the estimation of item and ability parameters and on item response theory equating of the GRE verbal scale. *Journal of Educational Measurement* 22:249-262.
6. Kingston, N.M. and Dorans, N.J. 1984. Item location effects and their implications for IRT equating and adaptive testing. *Applied Psychological Measurement* 8:147-154.

PUBLICATIONS: BOOK CHAPTERS AND ENCYCLOPEDIA ARTICLES

7. Kingston, N.M. (submitted). SAT College Admissions Test. In B. Kerr (Ed.) *Encyclopedia of Giftedness, Creativity, and Talent*. Thousand Oaks, CA: Sage Publishing.
8. Kingston, N.M. (accepted). ACT College Admissions Test. In B. Kerr (Ed.) *Encyclopedia of Giftedness, Creativity, and Talent*. Thousand Oaks, CA: Sage Publishing.
9. Kingston, N.M. (accepted). Self-report instruments. In S. Lopez (Ed.) *Encyclopedia of Positive Psychology*. Malden, MA: Blackwell Publishing.

10. Kingston, N.M. (accepted). Standardized tests. In N. Salkind (Ed.) *Encyclopedia of Educational Psychology*. Thousand Oaks, CA: Sage Publishing.
11. Kingston, N.M. (accepted). Norm-Referenced tests. In N. Salkind (Ed.) *Encyclopedia of Educational Psychology*. Thousand Oaks, CA: Sage Publishing.
12. Kingston, N.M. (2007). Future challenges to psychometrics: Validity, Validity, Validity. In C.R. Rao and S. Sinharay (Ed.) *Handbook of Statistics, 26: Psychometrics*. Amsterdam, The Netherlands: Elsevier.
13. Kingston, N.M. and Ehringhaus, M. (2005). Use of technology and principles of universal design to improve the validity and fairness of licensure tests. In J.L. Mouny and D.S. Martin (Ed.) *Assessing Deaf Adults*. Washington, DC: Gallaudet University Press.
14. Kingston, N.M., Kahl, S.R., Sweeney, K.P., and Bay, L. (2001). Setting performance standards using the body of work method. In G.J. Cizek (Ed.) *Setting performance standards: Concepts, methods, and perspectives*. Mahwah, NJ: Lawrence Erlbaum, Publishers.
15. Kingston, N.M. and Reidy, E. (1997). Kentucky's accountability and assessment systems. In J. Millman (Ed.) *Grading teachers, grading schools: Is student achievement a valid evaluation measure?* Thousand Oaks, CA: Corwin Publishers.
16. Kingston, N.M. and Reidy, E. (1997). KIRIS meets the critics: A little light and much heat. In J. Millman (Ed.) *Grading teachers, grading schools: Is student achievement a valid evaluation measure?* Thousand Oaks, CA: Corwin Publishers.

PUBLICATIONS: MONOGRAPHS

17. Dings, J., Childs, R., and Kingston, N.M. (2002). Effects of matrix sampling on student score comparability in constructed response and multiple-choice assessments. Washington, DC: Council of Chief State School Officers.
18. Kingston, N.M., Leary, L., and Wightman, L. (1988). An exploratory study of the applicability of item response theory methods to the Graduate Management Admissions Test. Los Angeles: Graduate Management Admissions Council.
19. Kingston, N.M. and Livingston, S.A. (1981). Effectiveness of the Graduate Record Examinations for predicting first-year grades: 1979-80 summary report of the Graduate Record Examinations Validity Study Service. Princeton, N.J.: Educational Testing Service.

PUBLICATIONS: REVIEWS

20. Kingston, N.M. (1991). Part I: Theory and General Principles [Review of *Educational Measurement, 3rd Edition*, R. Linn, editor]. *Applied Psychological Measurement* 15:208-212.

PUBLICATIONS: SELECTED TECHNICAL REPORTS

21. Dings, J., Gong, B., & Kingston, N. (1995) KIRIS Accountability Cycle I Technical Manual. Frankfort, KY: Kentucky State Department of Education.
22. Schaeffer, G.A. and Kingston, N.M. (1988). Strength of the analytical factor of the GRE General Test in several subgroups: a full-information factor analysis approach. RR 88-5. Princeton, N.J.: Educational Testing Service.
23. McKinley, R.L. and Kingston, N.M. (1987). Exploring the use of IRT equating for the GRE Subject Test in Mathematics. RR 87-21. Princeton, N.J.: Educational Testing Service.
24. Kingston, N.M. (1986). Assessing the dimensionality of the GMAT Verbal and Quantitative Measures using full-information factor analysis. RR 86-13. Princeton, N.J.: Educational Testing Service.
25. Kingston, N.M. and Holland, P.W. (1986). Alternative methods of equating the GRE General Test. GRE Board Professional Report 81-16P. Princeton, N.J.: Educational Testing Service.
26. Kingston, N.M., Leary, L.F., and Wightman, L.E. (1985). An exploratory study of the applicability of item response theory methods to the Graduate Management Admission Test. RR 85-34. Princeton, N.J.: Educational Testing Service.
27. Kingston, N.M. and Turner, N.J. (1984). Analysis of score change patterns of examinees repeating the Graduate Record Examinations General Test. GRE Board Professional Report 83-5P. Princeton, N.J.: Educational Testing Service.
28. Kingston, N.M. (1984). Reanalysis of the psychometric characteristics of the GRE General Test. Unpublished manuscript. Princeton, N.J.: Educational Testing Service.
29. Kingston, N.M. (1983). Choosing a procedure for selecting a subset of variables that maximizes criterion-related cross-validity. Unpublished doctoral dissertation.
30. Kingston, N.M. and Dorans, N.J. (1982). The feasibility of using item response theory as a psychometric model for the GRE Aptitude Test. GRE Board Professional Report 79-12P. Princeton, N.J.: Educational Testing Service.
31. Kingston, N.M. and Dorans, N.J. (1982). The effect of the position of an item within a test on item responding behavior: an analysis based on item response theory. GRE Board Professional Report 79-12bP. Princeton, N.J.: Educational Testing Service.

SELECTED PRESENTATIONS

32. Kingston, N.M. 2008. The Anatomy of a Scoring: A Forensic Analysis of the Grading of a Open-Ended Test Item. King Fahd University of Petroleum and Minerals, Dharhan, Saudi Arabia.
33. Kingston, N.M. 2008. Considerations for the Development and Use of Open-Ended Test Items. King Fahd University of Petroleum and Minerals, Dharhan, Saudi Arabia.

34. Kingston, N.M. 2008. The Anatomy of a Scoring: A Forensic Analysis of the Grading of a Constructed-Response Test tem. National Council on Measurement in Education, New York, NY.
35. Kingston, N.M. 2007. Comparability of Computer- and Paper-Administered Multiple-Choice Tests for K-12 Populations: A Synthesis of 89 Studies. National Council on Measurement in Education, Chicago, IL.
36. Kingston, N.M. 2005. Hot topics in testing. CASMA-ACT Invitational Conference, Iowa City, IA.
37. Kingston, N.M. 2004. Alternative approaches to the implementation of computerized statewide accountability testing systems. 34th annual Large-Scale Assessment Conference of the Chief Council of State School Officers, Boston, MA.
38. Kingston, N.M. 2003. K-12 computer-based testing: is there a place for data in the implementation decision-making process? 33rd annual Large-Scale Assessment Conference of the Council of Chief State School Officers, San Antonio, TX.
39. Kingston, N.M. and Ehringhaus, M. 2002. The future of universal design (or since it is already tomorrow why can't we use yesterday's technology yet?). Gallaudet Research Institute Conference – High Stakes Testing: Are Deaf and Hard of Hearing Students Being Left Behind? Washington, DC.
40. Kingston, N.M. 2002. Item review 101: reviewing items and tests from multiple perspectives. 32nd annual Large-Scale Assessment Conference of the Council of Chief State School Officers, Palm Desert, CA.
41. Kingston, N.M. 2002. Comparability of scores from computer- and paper-based administrations for students in grades K-12. 32nd annual Large-Scale Assessment Conference of the Council of Chief State School Officers, Palm Desert, CA.
42. Kingston, N.M. 2002. Georgia CRCT: The largest, most comprehensive K-12 web-based testing system goes operational. 32nd annual Large-Scale Assessment Conference of the Council of Chief State School Officers, Palm Desert, CA.
43. Kingston, N.M. 2001. Evaluating the validity and defensibility of the body of work standard setting procedure. 31st annual Large-Scale Assessment Conference of the Council of Chief State School Officers, Houston, TX.
44. Kingston, N.M. 2001. Implications of matrix sampling for state testing programs. 31st annual Large-Scale Assessment Conference of the Council of Chief State School Officers, Houston, TX.
45. Dings, J., Childs, R., and Kingston, N.M. 2002. Effects of matrix sampling on student score comparability in constructed response and multiple-choice assessments. National Council for Measurement in Education, Seattle, WA.
46. Kingston, N.M., 2000. Dodging bullets: minimizing the probability of analysis and reporting problems. 30th annual Large-Scale Assessment Conference, Snowbird, UT.
47. Kingston, N.M., 2000. Combining multiple sources of information in the setting of performance standards. 30th annual Large-Scale Assessment Conference, Snowbird, UT.

48. Kingston, N.M. 2000. Accountability through school report cards: efforts of several states. 30th annual Large-Scale Assessment conference, Snowbird, UT.
49. Kingston, N.M., 2000, Body of work standard setting method: Massachusetts Comprehensive Assessment System. National Council on Measurement in Education Annual Meeting, New Orleans, LA.
50. Sweeney, K., Kahl, S.R., Kingston, N.M., Bay, L. (2000) Classroom Teacher Judgment and Body of Work Method: Wyoming Comprehensive Assessment System (WyCAS). Annual meeting of the American Research Association, New Orleans, LA.
51. Kingston, N.M. and Nellhaus, J. 1999. Standard-setting for the Massachusetts Comprehensive Assessment System: the body of work method. 29th annual Large-Scale Assessment conference, Snowbird, UT.
52. Kingston, N.M. 1998. Development of a prototype of a computerized accommodations version of a standards-based assessment. 28th annual Large-Scale Assessment Conference, Colorado Springs, CO.
53. Kingston, N.M. 1998. Assessing adequate yearly progress in a standards-based comprehensive testing environment: holy grail or holy terror. 28th annual Large-Scale Assessment Conference, Colorado Springs, CO.
54. Kingston, N.M. 1997. Scoring student responses through imaging: Evidence that new technology will solve a major concern of performance assessment. 27th annual Large-Scale Assessment Conference, Colorado Springs, CO.
55. Kingston, N.M. 1996. Responding to criticisms of performance assessment. Council of Chief State School Officers 26th annual Large-Scale Assessment Conference, Phoenix, AZ.
56. Dings, J. and Kingston, N.M. 1996. Estimating the accuracy of complex school accountability decisions: accounting for task variance. National Council for Measurement and Evaluation, New York, NY.
57. Kingston, N.M. and Dings, J. 1995. Estimating the accuracy of complex school accountability decisions. Symposium: Performance assessment: the rhetoric meets the reality (and they are both doing quite fine, thank you). National Council for Measurement and Evaluation, San Francisco, CA.
58. Kehoe, J.F., Kingston, N.M., and McCormick, D.J. 1993. Practical considerations for low-cost computerized testing. Symposium: Computer and multimedia testing for new skills and abilities: Practical issues. Society for Industrial and Organizational Psychology, San Francisco, CA.
59. Kingston, N.M. 1993. Increasing opportunity via technology-based testing. Symposium: Assessment, diversity, and America 2000. American Counseling Society, Atlanta, GA.
60. Kingston, N.M. 1989. An investigation of two types of selection effects on validity coefficients. Symposium: Alternative approaches to problems involved in the validation of higher education admission tests. National Council on Measurement in Education, San Francisco, CA.

61. Kingston, N.M., Schneider, L.M., and Briel, J.B. 1988. Overcoming statistical difficulties in comparing the predictive accuracy of the GRE General Test and undergraduate grades for subgroups based on gender and ethnicity. Symposium: Solving perennial methodological problems in validity research. American Psychological Association, Atlanta, GA.
62. Kingston, N.M. 1988. Using an English language graduate admissions test for non-native speakers of English: perils and pitfalls. National Association for Foreign Student Affairs, Washington, DC.
63. Kingston, N.M. 1988. Use of GRE scores and the undergraduate grade-point average to predict graduate school success. American Association of Collegiate Registrars and Admissions Officers, Nashville, TN.
64. Kingston, N.M. and McKinley, R.L. 1988. Assessing the structure of the GRE General Test using confirmatory multidimensional item response theory. Symposium: Item response theory meets multidimensional tests. American Educational Research Association, New Orleans, LA.
65. McKinley, R.L. and Kingston, N.M. 1988. Confirmatory analysis of test structure using multidimensional IRT. National Council on Measurement in Education, New Orleans, LA.
66. Kingston, N.M. and Stocking, M.L. 1986. Psychometric issues for IRT-based test construction. Symposium: Item response theory based test development. American Psychological Association, Washington, DC.
67. Kingston, N.M., Durso, R.V., and Schneider, L.M. 1986. The Graduate Record Examinations Validity Study Service: yesterday and tomorrow. Symposium: Designing a validity research service. National Council on Measurement in Education, San Francisco, CA.
68. Kingston, N.M. 1985. Comparison of bias and root mean squared error for four variants of IRT true score equating. Fourth European Meeting of the Psychometric Society, Cambridge, England.
69. Kingston, N.M. 1985. Assessing guessing behavior using the three-parameter logistic model. Symposium: Dynamics of guessing behavior: methodological approaches. National Council on Measurement in Education, Chicago, IL.
70. Kingston, N.M. 1985. The incremental validity of the GRE analytical measure for various department types. Symposium: The GRE Analytical Test: New measure for graduate school decision making. American Educational Research Association, Chicago, IL.
71. Kingston, N.M. 1984. Analysis of shifts in scale and construct through the use of repeater data. American Educational Research Association, New Orleans, LA.
72. Kingston, N.M. and Dorans, N.J. 1983. Assessing local independence for IRT: factor analysis of item intercorrelations after partialing out estimated theta. Psychometric Society, Los Angeles, CA.
73. Kingston, N.M. and Dorans, N.J. 1982. Equating of GRE Aptitude Test scores using item response theory: the effect of multidimensionality. Symposium: Recent developments in equating at ETS. American Psychological Association, Washington, DC.

74. Dorans, N.J. and Kingston, N.M. 1982. Implications of item pool fungibility for innovative testing modes and equating methods. Symposium: Topics in item response theory. Psychometric Society, Montreal.
75. Kingston, N.M., Livingston, S.A., and Turner, N.J. 1982. Predicting success in graduate school: 189 validity studies. Symposium: Interpreting data through eternally smudged glasses: the continuing saga of graduate and professional school validation research. American Educational Research Association, New York, NY.
76. Dorans, N.J. and Kingston, N.M. 1981. Assessing the local independence assumption of item response theory in GRE item types and populations. Psychometric Society, Chapel Hill, NC.
77. Kingston, N.M. and Dorans, N.J. 1981. The effect of the position of an item within a test on item responding behavior: an analysis based on item response theory. Symposium: Practice effects: problems and solutions. National Council on Measurement in Education, Los Angeles, CA.
78. Kingston, N.M. and Dorans, N.J. 1981. Would it be advantageous to use the three-parameter logistic model as a psychometric base for the GRE Aptitude Test? Symposium: Assessing the feasibility of using item response theory for operational testing programs. American Educational Research Association, Los Angeles, CA.
79. Kingston, N.M. and White, E.B. 1980. Item response theory statistics, classical test and item statistics: what does it all mean when you sit down to construct a test? American Educational Research Association, Boston, MA.

PATENT APPLICATIONS

80. United States Patent Application 20030104344, June 5, 2003 (provisional application filed December 3, 2001). Structured observation system for early literacy assessment.
81. United States Patent Application 20040229199, Filed April 15, 2004. Computer-based standardized test administration, scoring, and analysis system.

COMPETITIVELY FUNDED RESEARCH PROJECTS

Combining multiple IRT parameter estimates, Educational Testing Service

Exploring the Use of IRT Equating for the GRE Subject Test in Mathematics, Graduate Record Examinations Board

Estimating Equating Functions on Standardized Test Populations, Educational Testing Service

An Exploratory Study of the Applicability of Item Response Theory to the Graduate Management Admissions Test, Graduate Management Admissions Council

Evaluation of the Restructured Graduate Record Examinations General Test: Analysis of Score Change Patterns for Repeaters, Graduate Record Examinations Board

Feasibility of using Item Response Theory as a Psychometric Basis for the Graduate Record Examinations Aptitude Test, Graduate record Examinations Board

SERVICE

UNIVERSITY, SCHOOL, AND DEPARTMENT COMMITTEES

Ad hoc Advisory Committee on Student Evaluation of Faculty (2006-2007)
Center for Psychoeducational Services Advisory Council (2006-2009)
Educational Psychology and Research Faculty Search Committee (2006-2007)
Graduate Studies Committee (2007-2010)
School of Education Strategic Planning Committee (2007-2008)
Quantitative Psychology Visiting Professor Search Committee (2006-2007)
Quantitative Psychology Assistant Professor Search Committee (2007-2008)
University of Kansas Judicial Board (2007-2010)
Psychology in Research Department faculty Evaluation Committee (2008)

SELECTED OTHER PROFESSIONAL COMMITTEES

Utah State Office of Education Computer-Based Testing Summit, 2007
United States Department of Education Workshop on Use of Portfolios in NCLB Assessment Programs, 2007
Joint Committee on Testing Practices, 2006-2007
New Hampshire State Department of Education Advisory Committee on Score Reporting, 2000
Career Channel Advisory Group, 1991
National Research Council Workshop on Confidentiality of Graduate Data, 1988
Defense Advisory Council on Military Personnel Testing, 1987–1988

JOURNAL REVIEWER

Applied Measurement in Education
Educational Measurement: Issues and Practice
Educational Researcher
Journal of Counseling and Development
Journal of Behavioral and Educational Statistics
Journal of Educational Measurement
Journal of Educational Psychology
Journal of Educational Statistics
Measurement and Evaluation in Counseling and Development
Psychological Methods
Psychometrika

PUBLIC SERVICE

Member, Greenland, N.H. Capital Improvement Plan Committee (1998)
Alternate Member, East Amwell School District Strategic Planning Council (1993)
Trustee, Pennington Montessori School, Pennington, N.J.; Chairperson, Long-Range Planning Committee (1992–1993)
Member, Franklin Township Board of Education, Franklin Township, Somerset County, N.J. (1985)

OTHER

PROFESSIONAL AFFILIATIONS

American Educational Research Association
American Psychological Association
National Council on Measurement in Education
Psychometric Society
Society for Industrial and Organizational Psychology

PROFESSIONAL WITNESS/LEGAL CONSULTATION

Clady et al. versus the County of Los Angeles
Kurvers et al. versus National Computer Systems

RESEARCH MANAGEMENT

As Vice President, Research at CTB McGraw-Hill, oversaw the development of a research agenda, reviewed research ideas and research projects. Implemented a technical advisory committee of university testing experts to help guide the research agenda and provide input on challenging research problems.

At Measured Progress, implemented a technical advisory committee of university testing experts to help guide the research agenda and provide input on challenging research problems.

As Associate Commissioner, Office of Curriculum, Assessment, and Accountability, Kentucky Department of Education, developed a research agenda to support Kentucky's assessment and curriculum goals. Involved nationally prominent researchers from within and outside the state.

As Director of Research and New Testing Initiatives for Educational Testing Services' Graduate Records Examinations (GRE) Program, designed and administered an extensive research program that led to the development of models for future versions of the GRE including computerized adaptive testing and addition of a writing measure. Supported the GRE Board Research Committee to allow it to efficiently guide GRE Program research and development, and proper use of GRE tests. Improved the quality and timeliness of GRE research précis, proposals, and final reports. Arranged the revision of the GRE Research Frameworks to meet the current needs of the GRE Board and ETS.

As Director of Research and Test Development for the GRE Program, was responsible for all administrative aspects of GRE research. Worked with the GRE Board and its Research Committee to develop and help execute long-term research plans. Among numerous committee and task force

memberships at ETS, served on the Research Planning Committee on Technology and Testing and the Strategic Planning Committee on Alternative Test Delivery.

As Director of Selection Research for the Los Angeles County Department of Personnel, held responsibilities for job analysis, construction of new testing material, revision of old testing material, review of appropriateness of old testing material for specific job classes, content validation, criterion-related validation, construct validation, adverse impact analysis, setting cut scores, item and test bias studies, employee retention studies, and development and utilization of new technology (microcomputers, minicomputers, intelligent terminals, scanners, etc.).

As Personnel Analyst, was responsible for implementing new technology, both psychometric and computer-based. Served as project director and principal investigator for “Clerical Employment Study,” “Superior Court Clerk Trainee Retention Study,” and “Nursing Attendant Validity Study.” Designed County of Los Angeles Test Analysis system.

As independent research consultant, selected and developed research instruments. Trained research assistants. Planned and carried out complicated data analyses using SPSS, BMD, and Fortran. Interpreted results for clients. Clients included State of Connecticut Department of Education, Bank Street College of Education, Lee-Hecht and Associates, Horace Mann-Lincoln Institute, and Celanese Industries.

MEASUREMENT AND RESEARCH

At CTB McGraw-Hill, served as an internal consultant on complex, unusual, or sensitive measurement problems for approximately 25 customized state testing programs and 100 proprietary products.

At Measured Progress, designed assessment programs for state clients. Served as an internal consultant on complex, unusual, or sensitive measurement problems for approximately 15 customized state testing programs. Worked with state technical advisory committees to bring forward and address measurement issues.

As an assessment consultant, used item response theory to select items for new parallel versions of the GATB.

As Group Head and Senior Measurement Statistician for Educational Testing Service, was in charge of Graduate Record Examinations and Language Testing Programs Statistical Analysis. Analyzed policy implications of psychometric decisions regarding testing programs. Provided statistical and psychometric consultation for various testing programs, proposals, and research projects. Responded to requests for proposals. Consulted on all psychometric issues for the Graduate Record Examinations (GRE) Program, Test of English as a Foreign Language, Educational Commission for Foreign Medical Graduates English Examination, Commission for Graduates of Foreign Nursing Schools English Examination, Test of English for International Communication, *Prueba de Admision par Estudiantes Graduados*, and Test of Spoken English. Directed or co-directed numerous development and research projects including ETS Equating System Redesign, Combining Multiple IRT Parameter Estimates, Exploring the Use of IRT Equating for the GRE Subject Test in Mathematics, Estimating Equating Functions on Standardized Test Populations, An Exploratory Study of the Applicability of Item Response Theory to the Graduate Management Admission Test, Alternative Methods for Equating the Graduate Record Examinations Aptitude Test, and Evaluation of the Restructured Graduate Record Examinations General Test: Analysis of Score Change Patterns for Repeaters.

As Associate Measurement Statistician for Educational Testing Service, was responsible for all psychometric decisions for Educational Commission for Foreign Medical Graduates English

Examination, Commission for Graduates of Foreign Nursing Schools English Examination, and Graduate Record Examinations Validity Study Service. Psychometric consultant for GRE Subject Tests and for Graduate Management Admission Test Validity Study Service. Completed item response theory apprenticeship with Frederic Lord. Served as project director and principal co-investigator for “Feasibility of Using Item Response Theory as a Psychometric Basis for the Graduate Record Examinations Aptitude Test.” Member of Program Audit Committee: Test Reliability.

PROGRAM AND PRODUCT DESIGN

At CTB McGraw-Hill, review, critique, approve all proposals for new products.

At Measured Progress, responsible for development and oversight of plans for products and services for computer-based testing, professional development, and non-customized assessments. Provide design advice for state contracts. Through FY 2002, worked with all client management, test development, and measurement divisions to ensure psychometric quality and continual improvement in all project designs.

As an assessment consultant, developed computer-based training and assessment products for the workplace and educational markets. Developed strategic plans, performed market analyses, designed new products, and performed assessment-related consulting services for businesses. Clients included AT&T, Council of Landscape Architecture Registration Boards, Educational Testing Service, The Roach Organization, U.S. Department of Labor, and Whittle Communications.

At Educational Testing Service, Center for Occupational and Professional Assessment, formulated and implemented strategic plans that included facilitation of work-based learning by better integrating assessment with instruction, developing performance-based assessments that realistically captured the richness of tasks required in the workplace. For the Graduate Record Examinations (GRE) Program, formulated and administered an agenda of research and development that will lead to radically different and improved Graduate Record Examinations that will include essay testing, computerized adaptive testing, and the use of artificial intelligence to score constructed-response item types.

SYSTEMS DESIGN AND PROGRAMMING

At Measured Progress, as acting CTO, responsible for overall management of all software development projects, including *iTest*, Measured Progress’s distributed architecture based test development, publication, and administration system.

As an assessment consultant created computer-based assessment and instruction systems. Projects included development of a computer-scored typing and stenography test; computerization of a management assessment battery; development of a computer-assisted job simulation; computerization of clerical, sales, and supervision assessment batteries; development of a computerized tutorial for a job application system; development of a computerized version of Program for Assessing Your Employability Skills (PAYES); and analysis of the computerized test administration market.

For Educational Testing Service, developed the specifications for the item response theory (IRT) Test Development System.

MANAGEMENT , ADMINISTRATION, AND STRATEGIC PLANNING

As Vice President, Research, CTB McGraw-Hill, responsible for a staff of as many as 90 people, including about 25 Ph.D.s. Reorganized organizational structure and updated work flow, processes and systems. Developed a research agenda. Implemented a technical advisory committee to provide external review of strategic directions for key research projects.

As Vice President, general manager, CTB McGraw-Hill led a locations initiative to determine a second major location. Participated in strategic planning efforts including organic growth strategies and acquisitions.

As Senior Vice President and Chief Operating Officer of Measured Progress, between 1997 and 2001 was responsible for all internal operational processes. As part of a strategic plan for growth associated with *No Child left Behind*, for 2002, focused on improving processes, systems, and structure within Information Technology and Measurement, Design, and Analysis. For 2003, focused on launching new business units for computer-based testing, professional development services and tools, and non-customized assessment products.

As Vice President of Advanced Systems (now Measured Progress), was responsible for facilitation of continual improvement in the test development, test publication and data and psychometric analysis processes. Served as senior psychometric advisor to the company and clients, and member of corporate executive management team.

As Associate Commissioner, Office of Curriculum, Assessment, and Accountability, Kentucky Department of Education, held total responsibility for the development and maintenance of an integrated system of primarily performance-based assessment and curriculum support for the Kentucky school accountability system. Worked directly with teachers, school administrators, superintendents, the State Board of Elementary and Secondary Education, and state legislators to monitor and improve state assessment and curriculum efforts. Managed an office staff of approximately 65 and a budget of \$30,000,000. Monitored a \$7,500,000 annual contract for the development, administration, scoring, and reporting of student and school assessment results. Participated in the development of state educational policy intended to dramatically increase the learning of 600,000 Kentucky students.

For Educational Testing Service (ETS), served as Executive Director of Workplace Assessment and Training, Center for Occupational and Professional Assessment. Started a new division within ETS. Responsible for formulating and carrying forward ETS's strategic plans for (1) enhancing the transition from school to workplace, (2) providing guidance to people to improve their career choices, (3) facilitate work-based learning by better integrating assessment with instruction, and (4) developing performance-based assessments that realistically capture the richness of tasks required in the workplace. Responsible for oversight of all aspects of numerous testing programs including the National Council of Architectural Registration Boards examination program, Aequitas Office Skills Testing Program, Assess Your Management Skills (AYMS), Program for Assessing Youth Employability Skills (PAYES), JobTap, SIGI, and the Tests of Applied Literacy Skills.

For ETS, served as Graduate Record Examinations (GRE) Director of Research and Test Development, managed a 12-person staff and a five million dollar budget. Responsible for all administrative aspects of GRE research, test development, and new project development.

Supervised staff, developed budgets, and created staffing plans as Group Head of Statistical Analysis at ETS, and as Director of Selection Research for the Los Angeles County Department of Personnel.

JOB ANALYSIS

For the Los Angeles County Department of Personnel, responsible for job analysis throughout all divisions of county administration. For the Workplace Assessment and Training division of ETS, directed job analysis project for Council of Landscape Architecture Registration Boards.