ETS 2015 Research Publications — Year in Review

Since its founding in 1947, ETS has conducted and disseminated scientific research to support its products and services and to advance the measurement and education fields.

In keeping with these goals, ETS is committed to making its research freely available to the professional community and to the general public.

This is a list of 2015 ETS research publications – those that ETS published as well as those that appeared in independent journals and books. In most cases, ETS staff members or affiliates were the lead authors of the independent publications listed. Publication titles link to abstracts, citation records, or full text where available.

Published accounts of ETS research, including papers in the ETS Research Report series, undergo a formal peer-review process by ETS staff to ensure that they meet established scientific and professional standards.

All such ETS-conducted peer reviews are in addition to any reviews that outside organizations may provide as part of their own publication processes.

Due to production deadlines, some 2015 ETS publications may not be listed. Find citations in this guide and many more — as well as access to the full text for ETS-published works — at http://search.ets.org/researcher.
Contents

This guide to 2015 ETS research publications lists works in these areas:

K–12 Teaching, Learning, and Education Policy.................................................................3
Assessments for People with Disabilities........................................................................7
English Language Learning and Assessment.................................................................7
International Large-Scale Assessment........................................................................11
Automated Scoring and Natural Language Processing.................................................11
Higher Education and Workforce Readiness..............................................................15
Statistics and Psychometrics......................................................................................17
K–12 Teaching, Learning, and Education Policy

Enhancing Young Hispanic Dual Language Learners’ Achievement: Exploring Strategies and Addressing Challenges

ACKERMAN, D. J., & TAZI, Z.
ETS Research Report No. RR-15-01
Policy Information Report

Effects of Multiple-Try Feedback and Question Type During Mathematics Problem Solving on Performance in Similar Problems

ATTALI, Y.
Computers & Education, v86, p260-267

Gamification in Assessment: Do Points Affect Test Performance?

ATTALI, Y., & ARIELI-ATTALI, M.
Computers & Education, v83, p57–63

Understanding Consequential Assessment Systems of Teaching: Year 2 Final Report to Los Angeles Unified School District

ETS Research Memorandum No. RM-15-12

The Changing Nature of Educational Assessment

BENNETT, R. E.
Review of Research in Education, v39 n1, p370–407

Students at the Margins and the Institutions That Serve Them: A Global Perspective

BLOE, D.
ETS Policy Notes, Session 537

Tablet-Based Math Assessment: What Can We Learn from Math Apps?

CAYTON-HODGES, G. A., FENG, G., & PAN, X.
Journal of Educational Technology & Society: Special Issue on Technology Supported Assessment in Formal and Informal Learning, v18 n2, p3–20

Psychometric Considerations for the Next Generation of Performance Assessment

DAVEY, T., FERRARA, S., HOLLAND, P. W., SHAVELSON, R., WEBB, N. M., & WISE, L. L.
Report of the Center for K–12 Assessment & Performance Management at ETS
Key Practices in the English Language Arts (ELA): Linking Learning Theory, Assessment, and Instruction

Deane, P., Sabatini, J., Feng, G., Sparks, J., Song, Y., Fowles, M., O’Reilly, T., Jude’s, K., Krovetz, R., & Foley, C.
ETS Research Report No. RR-15-17

The Key Practice, Discuss and Debate Ideas: Conceptual Framework, Literature Review, and Provisional Learning Progressions for Argumentation

Deane, P., & Song, Y.
ETS Research Report No. RR-15-33

Exploring the Feasibility of Using Writing Process Features to Assess Text Production Skills

Deane, P., & Zhang, M.
ETS Research Report No. RR-15-26

Measuring Motivation in Low-Stakes Assessments

Finn, B.
ETS Research Report No. RR-15-19

America’s Skills Challenge: Millennials and the Future

Goodman, M., Sands, A. M., & Coley, R. J.
The ETS Center for Research on Human Capital and Education

Using Representational Tools to Learn About Complex Systems: A Tale of Two Classrooms

Hmele-Silver, C. E., Liu, L., Gray, S., & Jordan, R.
Journal of Research in Science Teaching, v52 n1, p6–35

Conversation-Based Assessment

Jackson, T., & Zapata-Rivera, D.
R&D Connections, n25

Classroom Assessment Standards for PreK-12 Teachers: Joint Committee on Standards for Educational Evaluation

Klinger, D. A., McDivitt, P. J., Howard, B. B., Muñoz, M., Rogers, W. T., & Wylie, E. C.
Kindle book edition
Inferring Constructs of Effective Teaching from Classroom Observations: An Application of Bayesian Exploratory Factor Analysis Without Restrictions

LOCKWOOD, J. R., SAVITSKY, T. D., & MCCAFFREY, D. F.
The Annals of Applied Statistics, v9 n3, p1484-1509

Building and Sharing Knowledge Key Practice: What Do You Know, What Don’t You Know, What Did You Learn?

O’REILLY, T., DEANE, P., & SABATINI, J.
ETS Research Report No. RR-15-24

Recommending a Passing Score for the Praxis® Performance Assessment for Teachers (PPAT)

REESE, C. M., & TANNENBAUM, R. J.
ETS Research Memorandum No. RM-15-11

Alignment Between the Praxis® Performance Assessment for Teachers (PPAT) and the Interstate Teacher Assessment and Support Consortium (InTASC) Model Core Teaching Standards

REESE, C. M., TANNENBAUM, R. J., & KUKU, B.
ETS Research Memorandum No. RM-15-10

Ranking Systems Used in Gaming Assessments and/or Competitive Games

ROTOU, O., QIAN, X., & VON DAVIER, M.
ETS Research Memorandum No. RM-15-03

The System Architecture and Tools of the Partnership for Assessment of Readiness for College and Careers

SIEGFRIED, J.
Report of the Center for K–12 Assessment & Performance Management at ETS

Cognitively Based Assessment of Research and Inquiry Skills: Defining a Key Practice in the English Language Arts

SPARKS, J. R., & DEANE, P.

Stereotype Threat, Inquiring About Test Takers’ Race and Gender, and Performance on Low-Stakes Tests in a Large-Scale Assessment

STRICKER, L. J., ROCK, D. A., & BRIDGEMAN, B.
ETS Research Report No. RR-15-02
How Teachers Teach: Mapping the Terrain of Practice

**Sykes, G., & Wilson, S.**

ETS White Paper

Consistency of Angoff-Based Standard-Setting Judgments: Are Item Judgments and Passing Scores Replicable Across Different Panels of Experts?

**Tannenbaum, R. J., & Kannan, P.**

*Educational Assessment, v20 n1, p66–78*

Psychometric Considerations for Performance Assessment With Implications for Policy and Practice

**Tucker, C. G.**

Report of the Center for K–12 Assessment & Performance Management at ETS

Authoring Conversation-based Assessment Scenarios

**Zapata-Rivera, D., Jackson, T., & Katz, I. R.**


**Sabatini, J., Bruce, K., Steinberg, J., & Weeks, J.**

ETS Research Report No. RR-15-32

Using *TextEvaluator*® to Quantify Sources of Linguistic Complexity in Textbooks Targeted at First-Grade Readers Over the Past Half Century

**Sheehan, K. M., Flor, M., Napolitano, D., & Ramineni, C.**

ETS Research Report No. RR-15-38

Alignment Between Innovative Summative Assessment Prototypes and the Common Core State Standards: An Exploratory Investigation

**Tannenbaum, R. J., Baron, P. A., & Kannan, P.**

ETS Research Memorandum No. RM-15-07

Process Features in Writing: Internal Structure and Incremental Value Over Product Features

**Zhang, M., & Deane, P.**

ETS Research Report No. RR-15-27
An Exploratory Study Using Social Network Analysis to Model Eye Movements in Mathematics Problem Solving

ZHU, M., & FENG, G.
Paper in Proceedings of the Fifth International Conference on Learning Analytics and Knowledge, p383–387

Assessments for People with Disabilities

Using Test Scores From Students With Disabilities in Teacher Evaluation

BUZICK, H. M., & JONES, N. D.
Educational Measurement: Issues and Practice, v34 n3, p28–78

Assistive Technologies for Computer-Based Assessments

HAKKINEN, M.
R&D Connections, n24

English Language Learning and Assessment

A Comparison of Newly-Trained and Experienced Raters on a Standardized Writing Assessment

ATTALI, Y.
Language Testing, Online First

Automated Trait Scores for TOEFL® Writing Tasks

ATTALI, Y., & SINHARAY, S.
ETS Research Report No. RR-15-14

Test Takers’ Writing Activities During the TOEFL iBT® Writing Tasks: A Stimulated Recall Study

BARKAOUI, K.
ETS Research Report No. RR-15-04, TOEFL iBT-25

Predicting Grades from an English Language Assessment: The Importance of Peeling the Onion

BRIDGEMAN, B., CHO, Y., & DIPIETRO, S.
Language Testing, Online First

Parsing Learner Text: To Shoehorn or not to Shoehorn

CAHILL, A.
Paper in Proceedings of LAW IX – The 9th Linguistic Annotation Workshop, p144-147
Analyzing and Comparing Reading Stimulus Materials Across the TOEFL® Family of Assessments

Chen, J., & Sheehan, K. M.
ETS Research Report No. RR-15-08, TOEFL iBT-26

The Influence of Training and Experience on Rater Performance in Scoring Spoken Language

Davis, L.
Language Testing, Online First

Automated Scoring for the TOEFL Junior® Comprehensive Writing and Speaking Test

Evanini, K., Heilman, M., Wang, X., & Blanchard, D.
ETS Research Report No. RR-15-09

Patterns of Misspellings in L2 and L1 English: A View from the ETS Spelling Corpus

Flor, M., Futagi, Y., Lopez, M., & Mulholland, M.

Is There Really a Labor Market Advantage to Being Bilingual in the U.S.?

Gándara, P.
ETS Research Report No. RR-15-07
Policy Information Report

Language Ability of Young English Language Learners: Definition, Configuration, and Implications

Gu, L.
Language Testing, v32 n1, p21–38

Evaluating the TOEFL Junior® Standard Test as a Measure of Progress for Young English Language Learners

Gu, L., Lockwood, J. R., & Powers, D. E.
ETS Research Report No. RR-15-22

Examining the Internal Structure of the Test of English-for-Teaching (TEFT™)

Gu, L., Turkan, S., & Garcia Gomez, P.
ETS Research Report No. RR-15-16
Examining Performance Differences on Tests of Academic English Proficiency Used for High-Stakes Versus Practice Purposes

**Gu, L., & Xi, X.**  
ETS Research Memorandum No. RM-15-09

Psychometric Properties of the Working Memory Rating Scale for Spanish-Speaking English Language Learners

**Guzman-Orth, D., Grimm, R., Gerber, M., Orosco, M., Swanson, H. L., & Lussier, C.**  
*Journal of Psychoeducational Assessment*, v33 n6, p555–567

How Might a Translanguaging Approach in Assessment Make Tests Fairer and More Valid for English Language Learners/Emergent Bilinguals?

**Lopez, A. A., Guzman-Orth, D. A., & Turkan, S.**  
In Valdés, G., Menken, K., & Castro, M. (eds.) *Common Core Bilingual and English Language Learners: A Resource for Educators*. Caslon, Inc., p266-268

Pronunciation Accuracy and Intelligibility of Non-Native Speech

**Loukina, A., Lopez, M., Evanini, K., Suendermann-Oeft, D., Ivanov, A. V., & Zechner, K.**  
Paper in *Proceedings of INTERSPEECH 2015 Conference*, p1917-1921


**Manna, V., & Yoo, H.**  
ETS Research Report No. RR-15-25

Structural Equation Modeling Reporting Practices for Language Assessment

**Ockey, G. J., & Choi, I.**  
*Language Assessment Quarterly*, v12 n3, p305–319

The Extent to Which TOEFL iBT® Speaking Scores Are Associated with Performance on Oral Language Tasks and Oral Ability Components for Japanese University Students

**Ockey, G. J., Koyama, D., Setoguchi, E., & Sun, A.**  
*Language Testing*, v32 n1, p39–62

Enhancing the Interpretability of the Overall Results of an International Test of English-Language Proficiency

**Papageorgiou, S., Morgan, R., & Becker, V.**  
The Association Between TOEFL iBT® Test Scores and the Common European Framework of Reference (CEFR) Levels

PAPAGEORGIOU, S., TANNENBAUM, R. J., BRIDGEMAN, B., & CHO, Y.
ETS Research Memorandum No. RM-15-06

Developing and Validating Band Levels and Descriptors for Reporting Overall Examinee Performance

PAPAGEORGIOU, S., XI, X., MORGAN, R., & SO, Y.
Language Assessment Quarterly, v12 n2, p153-177

TOEFL Junior® Design Framework

SO, Y., WOLF, M. K., HAUCK, M. C., MOLLAUN, P., RYBINSKI, P., TUMPOSKY, D., & WANG, L.
ETS Research Report No. RR-15-13, TOEFL JR-02

Using Triologues to Measure English Language Skills

SO, Y., ZAPATA-RIVERA, D., CHO, Y., LUCE, C., & BATTISTINI, L.
Journal of Educational Technology & Society: Special Issue on Technology Supported Assessment in Formal and Informal Learning, v18 n2, p21–32

Mapping TOEIC® Scores to the Vietnamese National Standard: A Study to Recommend English Language Requirements for Admissions Into and Graduation From Vietnamese Universities

TANNENBAUM, R. J., & BARON, P. A.
ETS Research Memorandum No. RM-15-08

Mapping Scores From the TOEFL Junior® Comprehensive Test Onto the Common European Framework of Reference (CEFR)

TANNENBAUM, R. J., & BARON, P. A.
ETS Research Memorandum No. RM-15-13

Evaluating a Learning Tool for Young English Learners: The Case of the TOEFL® Primary™ English Learning Center

TIMPE-LAUGHLIN, V.
ETS Research Memorandum No. RM-15-04

Defining and Operationalizing the Construct of Pragmatic Competence: Review and Recommendations

TIMPE-LAUGHLIN, V., WAIN, J., & SCHMIDGALL, J.
ETS Research Report No. RR-15-06
International Large-Scale Assessment

Comparing Data Treatments on Item-Level Nonresponse and Their Effects on Data Analysis of Large-Scale Assessments: 2009 PISA Study

CHEN, H. H., VON DAVIER, M., YAMAMOTO, K., & KONG, N.
ETS Research Report No. RR-15-12

A Framework for Developing Comparable Multilingual Assessments for Minority Populations: Why Context Matters

OLIVERI, M., E., ERCIKAN, K., & SIMON, M.
International Journal of Testing: Special Issue: Themed Issue on the Assessment of Linguistic Minorities, v15 n2, p94–113

Automated Scoring and Natural Language Processing

Reliability-Based Feature Weighting for Automated Essay Scoring

ATTALI, Y.
Applied Psychological Measurement, v39 n4, p303–313

Supervised Word-Level Metaphor Detection: Experiments with Concreteness and Reweighting of Examples

BEIGMAN-KLEBANOV, B., LEONG, C. W., & FLOR, M.
Paper in Proceedings of the Third Workshop on Metaphor in NLP, p11–20

Automatic Assessment of Syntactic Complexity for Spontaneous Speech Scoring

BHAT, S., & YOON, S.-Y.
Speech Communication, v67, p42–57

Automatic Detection of Grammatical Structures from Non-Native Speech

BHAT, S., YOON, S.-Y., & NAPOLETANO, D.

Utilizing Multimodal Cues to Automatically Evaluate Public Speaking Performance

CHEN, L., LEONG, C. W., FENG, G., LEE, C. M., & SOMASUNDARAN, S.
Paper in Proceedings of International Conference on Affective Computing and Intelligent Interaction (ACII), p394-400
Content-Based Automated Assessment of Non-Native Spoken Language Proficiency in a Simulated Conversation

**Evanini, K., Singh, S., Loukina, A., Wang, X., & Lee, C. M.**


Automatic Scoring of Non-Native Children’s Spoken Language Proficiency

**Hassanali, K., Yoon, S.-Y., & Chen, L.**


Quantitative Psychology Research


ETS staff members were authors of the following chapters from the 79th Annual Meeting of the Psychometric Society in Springer’s *Proceedings in Mathematics & Statistics*, v140

**He, Q., & von Davier, M.**

*Identifying Feature Sequences from Process Data in Problem-Solving Items with N-Grams*, p173–190

**Zhang, M., Chen, J., & Ruan, C.**

*Evaluating the Detection of Aberrant Responses in Automated Essay Scoring*, p191–208

Automated Analysis of Text in Graduate School Recommendations

**Heilman, M., Breyer, F. J., Williams, F., Klieger, D., & Flor, M.**

ETS Research Report RR-15-23

Automated Speech Recognition Technology for Dialogue Interaction with Non-Native Interlocutors

**Ivanov, A.V., Ramanarayanan, V., Suendermann-Oeft, D., Lopez, M., Evanini, K., & Tao, J.**


Utilizing Depth Sensors for Analyzing Multimodal Presentations: Hardware, Software and Toolkits

**Leong, C. W., Chen, L., Feng, G., Lee, C. M., & Mulholland, M.**


Expert and Crowdsourced Annotation of Pronunciation Errors for Automatic Scoring Systems

**Loukina, A., Lopez, M., Evanini, K., Suendermann-Oeft, D., & Zechner, K.**

Paper in *Proceedings of INTERSPEECH 2015 Conference*, p2809-2813
Feature Selection for Automated Speech Scoring

Louvina, A., Zechner, K., Chen, L., & Heilman, M.
Paper in Proceedings of the Tenth Workshop on Innovative Use of NLP for Building Educational Applications, p12–19

Using F0 Contours to Assess Nativeness in a Sentence Repeat Task

Ma, M., Evanini, K., Loukina, A., Wang, X., & Zechner, K.
Paper in Proceedings of INTERSPEECH 2015 Conference, p653-657

Preliminary Experiments on Crowdsourced Evaluation of Feedback Granularity

Madinani, N., Chodorow, M., Cahill, A., Lopez, M., Futagi, Y., & Attali, Y.
Paper in Proceedings of the Tenth Workshop on Innovative Use of NLP for Building Educational Applications, p162-171

Measuring Feature Diversity in Native Language Identification

Malmasi, S., & Cahill, A.
Paper in Proceedings of the Tenth Workshop on Innovative Use of NLP for Building Educational Applications, p49-55

Validating Automated Essay Scoring: A (Modest) Refinement of the “Gold Standard”

Applied Measurement in Education, v28 n2, p130–142

An Analysis of Time-Aggregated and Time-Series Features for Scoring Different Aspects of Multimodal Presentation Data

Ramanarayanan, V., Chen, L., Leong, C. W., Feng, G., & Suendermann-Oeft, D.
Paper in Proceedings of INTERSPEECH 2015 Conference, p1373-1377

Evaluating Speech, Face, Emotion and Body Movement Time-Series Features for Automated Multimodal Presentation Scoring

Ramanarayanan, V., Leong, C. W., Chen, L., Feng, G., & Suendermann-Oeft, D.

A Distributed Cloud-Based Dialog System for Conversational Application Development

Ramanarayanan, V., Suendermann-Oeft, D., Ivanov, A. V., & Evanini, K.
Evaluation of e-rater® for the Praxis I® Writing Test

Ramineni, C., Trapani, C. S., & Williamson, D. M.
ETS Research Report No. RR-15-03

Aligning TextEvaluator® Scores With the Accelerated Text Complexity Guidelines Specified in the Common Core State Standards

Sheehan, K. M.
ETS Research Report No. RR-15-21

Experimental Assessment of the Tongue Incompressibility Hypothesis During Speech Production

Skordilis, Z. I., Ramanarayanan, V., Goldstein, L., & Narayanan, S. S.
Paper in Proceedings of INTERSPEECH 2015 Conference, p384-388

Sentence Boundaries in Text and Pauses in Speech: Correlation or Confrontation?

Stepikho, A., & Loukina, A.
Paper in Online Proceedings of the International Congress of Phonetic Sciences

HALEF: An Open-Source Standard-Compliant Telephony-Based Modular Spoken Dialog System: A Review and an Outlook

Suendermann-Oeft, D., Ramanarayanan, V., Teckenbrock, M., Neutatz, F., & Schmidt, D.
In Geunbae Lee, G., Kook Kim, H., Jeong, M., & Kim, J.-H. (eds.)
Natural Language Dialog Systems and Intelligent Assistants. Springer, p53-61

HALEF: An Open-Source Standard-Compliant Telephony-Based Modular Spoken Dialog System – A Review and an Outlook

Suendermann-Oeft, D., Ramanarayanan, V., Teckenbrock, M., Neutatz, F., & Schmidt, D.
Paper in Proceedings of the International Workshop on Spoken Dialog Systems, Busan, South Korea

Word-Level F0 Modeling in the Automated Assessment of Non-native Read Speech

Wang, X., Evanini, K., & Yoon, S.-Y.

Automated Scoring of Speaking Tasks in the Test of English-for-Teaching (TEFT™)

ETS Research Report No. RR-15-31
Reducing Annotation Efforts in Supervised Short Answer Scoring

Zesch, T., Heilman, M., & Cahill, A.

Paper in Proceedings of the Tenth Workshop on Innovative Use of NLP for Building Educational Applications, p124-132

Higher Education and Workforce Readiness

Development of a Forced-Choice Measure of Typical-Performance Emotional Intelligence

Anguiano-Carrasco, C., MacCann, C., Geiger, M., Seybert, J. M., & Roberts, R. D.

Journal of Psychoeducational Assessment, v33 n1, p83-97

Automated Trait Scores for GRE® Writing Tasks

Attali, Y., & Sinharay, S.

ETS Research Report No. RR-15-15

Texas Top Ten Percent Plan: How It Works, What Are Its Limits, and Recommendations to Consider

Flores, S. M., & Horn, C. L.

ETS Issue Brief

Educational Testing Service (ETS) Job Profiler for Validity Studies: Overview and Planned Application

Golubovich, J., Chatterjee, D., & Robbins, S. B.

ETS Research Memorandum No. RM-15-01

A Prototype Public Speaking Skills Assessment: An Evaluation of Human-Scoring Quality

Joe, J., Kitchen, C., Chen, L., & Feng, G.

ETS Research Report No. RR-15-36

Two Decades After the Affirmative Action Ban: Evaluating the University of California’s Race-Neutral Efforts

Kidder, W. C., & Gándara, P.

ETS Issue Brief

Investigation of Response Changes in the GRE® Revised General Test

Liu, O. L., Bridgeman, B., Gu, L., Xu, J., & Kong, N.

Educational and Psychological Measurement, v75 n 6, p1002-1020
The Promise and Peril for Universities Using Correlates of Race in Admissions in Response to the Grutter and Fisher Decisions

LONG, M.
ETS Issue Brief

A Study of the Influence of the New Careers in Nursing Program on the Culture of Participating Schools of Nursing

MILLETT, C. M., & KEVELSON, M.
ETS Research Report No. RR-15-30

New Careers in Nursing Scholar Alumni: Options in the Early Career Years

MILLETT, C. M., STICKLER, L. M., & WANG, H.
ETS Research Report No. RR-15-28

Accelerated Nursing Degree Programs: Insights Into Teaching and Learning Experiences

MILLETT, C. M., STICKLER, L. M., & WANG, H.
ETS Research Report No. RR-15-29

Can Socioeconomic Status Substitute for Race in Affirmative Action College Admissions Policies? Evidence From a Simulation Model

REARDON, S. F., BAKER, R., KASMAN, M., KLASIK, D., & TOWNSEND, J. B.
ETS Issue Brief

Anticipating College Enrollment: Adapting SuccessNavigator® for High School Students

RIKON, S. H., LIEBTAG, T., OLIVERA-AGUILAR, M., STEINBERG, J., & ROBBINS, S. B.
ETS Research Report No. RR-15-37

Understanding the Basic Speaking Skills of U.S. Adults: Reading Components in the PIAAC Literacy Survey

SABATINI, J.
The ETS Center for Research on Human Capital and Education

The First Year of Graduate Study: Documenting Challenges and Informing Ways to Reduce Attrition

SCHRAMM-POSSINGER, M. E., & POWERS, D. E.
ETS Research Memorandum No. RM-15-02
Development of an Evidence-Based Reading Fluency Program for Adult Literacy Learners

**SHORE, J. R., SABATINI, J., LENTINI, J., HOLTZMAN, S., & McNEIL, A.**
*Reading Psychology*, v36 n1, p86–104

An “Obama effect” on the GRE® General Test?

**STRICKER, L. J., & ROCK, D. A.**
*Social Influence*, v10 n1, p11–18

Assessing Civic Competency and Engagement in Higher Education: Research Background, Frameworks, and Directions for Next-Generation Assessment

**TORNEY-PURTA, J., CABRERA, J. C., CROTS ROOHR, K., LIU, O. L., & RIOS, J. A.**
ETS Research Report No. RR-15-34

Addressing Achievement Gaps: Advancing Success for Black Men in College

**YAFFE, D.**
ETS Policy Notes, v22 n1

Investigating a Scenario-Based Performance Assessment of Engineering Professional Skills (download the pdf article)

**ZHANG, M., KRANOV, A. A., BEYERLEIN, S. W., MCCORMACK, J. P., PEDROW, P. D., & SCHMECKPEPER, E.**

Statistics and Psychometrics

Location Indices for Ordinal Polytomous Items Based on Item Response Theory

ETS Research Report No. RR-15-20

Bayesian Networks in Educational Assessment

**ALMOND, R. G., MISLEY, R. J., STEINBERG, L., YAN, D., & WILLIAMSON, D.**
Book; Springer

Estimation of Ability from Homework Items When There Are Missing and/or Multiple Attempts

**BERGNER, Y., COLVIN, K., & PRITCHARD, D. E.**
Paper in *Proceedings of the Fifth International Conference on Learning Analytics and Knowledge*, p118–125
**Propensity Score Estimation with Boosted Regression**

BURGETTE, L. F., McCAFFREY, D. F., & GRIFFIN, B. A.


**Examining Potential Boundary Bias Effects in Kernel Smoothing on Equating: An Introduction for the Adaptive and Epanechnikov Kernels**

CID, J., & von DAVIER, A. A.

*Applied Psychological Measurement, v39 n3, p208–222*

**An Application of Exploratory Data Analysis in the Development of Game-Based Assessments**

DICERBO, K. E., BERTLING, M., STEPHENSON, S., JIA, Y., MISLEVY, R. J., BAUER, M. I., & JACKSON, T.


**Comparison of Integer Programming (IP) Solvers for Automated Test Assembly (ATA)**

DONOGHUE, J. R.

ETS Research Report No. RR-15-05

**A Program for Equivalent-Group Equating With Continuous Exponential Families**

HABERMAN, S. J.

ETS Research Memorandum No. RM-15-05

**Pseudo-Equivalent Groups and Linking**

HABERMAN, S. J.

*Journal of Educational and Behavioral Statistics, v40 n3, p254–273*

**Multivariate Analysis: Discrete Variables (Loglinear Models)**

HABERMAN, S. J.


**Repeater Analysis for Combining Information From Different Assessments**

HABERMAN, S. J., & YAO, L.

*Journal of Educational Measurement, v52 n2, p223–251*
Prediction of True Test Scores from Observed Item Scores and Ancillary Data

HABERMAN, S. J., YAO, L., & SINHARAY, S.
*British Journal of Mathematical and Statistical Psychology*, v68 n2, p363–385

Analyzing Process Data from Game/Scenario-Based Tasks: An Edit Distance Approach

HAO, J., SHU, Z., & VON DAVIER, A.
*JEDM - Journal of Educational Data Mining*, v7 n1, p33–50

Evaluating the Operational Feasibility of Using Subsets of Items to Recommend Minimal Competency Cut Scores

KANNAN, P., SGAMMATO, A., & TANNENBAUM, R. J.
*Applied Measurement in Education*, v28 n4, p292–307

Evaluating the Consistency of Angoff-Based Cut Scores Using Subsets of Items Within a Generalizability Theory Framework

KANNAN, P., SGAMMATO, A., TANNENBAUM, R. J., & KATZ, I. R.
*Applied Measurement in Education*, v28 n3, p169–186

Effectiveness of Item Response Theory (IRT) Proficiency Estimation Methods Under Adaptive Multistage Testing

KIM, S., MOSES, T., & YOO, H. H.
ETS Research Report No. RR-15-11

A Comparison of IRT Proficiency Estimation Methods Under Adaptive Multistage Testing

KIM, S., MOSES, T. P., & YOO, H. H.
*Journal of Educational Measurement*, v52 n1, p70–79

Investigating Test-Taking Behaviors Using Timing and Process Data

LEE, Y.-H., & HABERMAN, S. J.
*International Journal of Testing*, Online First

A Quasi-Parametric Method for Fitting Flexible Item Response Functions

LIANG, L., & BROWNE, M. W.
*Journal of Educational & Behavioral Statistics*, v40 n1, p5–34

A Note on Subscores

LIVINGSTON, S. A.
*Educational Measurement: Issues and Practice*, v34 n2, p5
Estimating Conditional Distributions of Scores on an Alternate Form of a Test

LIVINGSTON, S. A., & CHEN, H. H.
ETS Research Report No. RR-15-18

Alternative Statistical Frameworks for Student Growth Percentile Estimation

LOCKWOOD, J. R., & CASTELLANO, K. E.
Statistics and Public Policy, v2 n1, p1-9

Matching and Weighting with Functions of Error-Prone Covariates for Causal Inference

LOCKWOOD, J. R., & MCCAFFREY, D. F.
Journal of the American Statistical Association, Online First

Simulation-Extrapolation for Estimating Means and Causal Effects with Mismeasured Covariates

LOCKWOOD, J. R., & MCCAFFREY, D. F.
Observational Studies, v1, p241-290

Use of Jackknifing to Evaluate Effects of Anchor Item Selection on Equating With the Nonequivalent Groups With Anchor Test (NEAT) Design

LU, R., HABERMAN, S., GUO, H., & LIU, J.
ETS Research Report No. RR-15-10

The Impact of Measurement Error on the Accuracy of Individual and Aggregate SGP

MCCAFFREY, D. F., CASTELLANO, K. E., & LOCKWOOD, J. R.
Educational Measurement: Issues and Practice, v34 n1, p15–21

Methods for Evaluating Composite Reliability, Classification Consistency, and Classification Accuracy for Mixed-Format Licensure Tests

MOSES, T. P., & KIM, S.
Applied Psychological Measurement, v39 n4, p314–329

On the Explaining-Away Phenomenon in Multivariate Latent Variable Models

VAN RIJN, P., & RIJMEN, F.
British Journal of Mathematical and Statistical Psychology, v68 n1, p1–22
Estimating the Standard Error of the Impact Estimator in Individually Randomized Trials With Clustering

**Weiss, M. J., Lockwood, J. R., & McCaffrey, D. F.**
*Journal of Research on Educational Effectiveness*, Online First

An Alternative Way to Model Population Ability Distributions in Large-Scale Educational Surveys

**Wetzel, E., Xu, X., & von Davier, M.**
*Educational and Psychological Measurement*, v75 n5, p739-763

Multiple Ways to Detect Differential Item Functioning in SAS

**Zhang, Y.**