# George M. Harrison

Associate Professor Department of Educational Psychology College of Education University of Hawai'i at Mānoa

### Education

University of Hawai'i at

wai'i at | **Ph.D. in Educational Psychology** Mānoa | Department of Educational Psychology

2007–2013

Specialization: Measurement & Evaluation

Dissertation | Ti

The effects of intrajudge consistency feedback in an Angoff standard-

setting procedure

University of Hawai'i at

M.A. in English as a Second Language

 $\begin{array}{c} {\rm M\bar{a}noa} \\ 2000-2002 \end{array}$ 

Department of Second Language Studies Specialization: Teaching English to Speakers of Other Languages

University of California at Santa Cruz

B.A. in Anthropology

1990–1994

Specialization: Cultural Anthropology

## **Professional Positions**

## Aug 2019-present Aug 2013-Jul 2019

### Associate Professor Assistant Professor

University of Hawai'i at Mānoa, College of Education

I conduct research on evaluation and assessment in education. I also mentor graduate assistants in their research and evaluation activities, serve on thesis and dissertation committees, and teach courses in educational psychology.

Department of Educational

Instructional faculty (Aug 2021–present)

Psychology

Cooperating graduate faculty member (Oct 2015–July 2021)

Curriculum Research & Development Group

Instructional faculty (Aug 2013–July 2021)

#### Jan 2011-Jul 2013

#### Junior Specialist (Program Research & Evaluation)

University of Hawai'i at Mānoa, College of Education, Curriculum Research & Development Group I served as program evaluation and research manager, managing the evaluation team activities and collaborating with project personnel and stakeholders. I developed instruments and protocol guides for measuring program effects, conducted quantitative and qualitative analyses, and prepared reports and manuscripts.

#### Jan 2010–Jan 2011

#### Graduate Research Assistant

University of Hawai'i at Mānoa, College of Education, Curriculum Research & Development Group I assisted in conducting educational research and evaluation by implementing evaluation activities, collecting and analyzing data, and contributing to summative reports. I also created online surveys, analyzed qualitative interview data, and wrote case-study reports based on these data in conjunction with student assessment results.

## Jan-May 2011 Jan-May 2008

# Graduate Assistant

Lecturer

University of Hawai'i at Mānoa, College of Education, Educational Psychology

As the instructor on record, I taught EdEP 416: Student Assessment and EdEP 311: Psychological Foundations in Education

# Apr 2006–Mar 2007 Apr 2005–Mar 2006 Apr 2004–Jul 2007

## Acting Co-Director of the English Language Program Assistant-Director Lecturer

Nihon University at Mishima, English Language Program Shizuoka-Ken, Japan This was a three-year contracted faculty position. I taught undergraduate courses in English skills, research skills, academic writing, and teacher preparation, directed the in-house evaluation of the program, led teacher workshops, updated the program's policy and curriculum, served on testing committees to develop the university entrance exams, administered the Institutional TOEFL exams, and created and maintained an online course management system (Moodle) for a blended learning environment.

#### 1995-2003

# Teacher of English to Speakers of Other Languages

California, Hawai'i, Brazil, and South Korea I taught English courses in various places, including community colleges and programs in California (1 yr), language programs in Hawaii (2.5 yrs), and language institutes and schools in Brazil (4 mos) and South Korea (2.5 yrs). These included courses in composition, reading, speaking and listening, grammar, and content-based courses with a focus on language learning. My students ranged from community college students and immigrant job seekers in California to steel factory workers and large classes of middle-school children in suburban Korea.

# Courses and Advising

Undergraduate courses

Student Assessment (EDEP 416)

Introductory Statistics (EDEP 429)

Psychological Foundations of Education (EDEP 311)

Graduate courses

Survey Research Design & Analysis (EDEP 602)

Measurement in Education and Social Sciences (EDEP 616)

Quasi-experimental Designs (EDEP 768)

Completed chaired doctoral dissertation

Lisa Vallin, Ph.D. in Educational Psychology, completed 2019. A pedagogical approach to improving students' use of metacognitive strategies

# Completed doctoral dissertation committees

Joanna Philippoff, Ph.D. in Educational Psychology, completed 2021.

An examination of the long-term effects of a teacher professional development in inquiry science

Jessica Miranda, Ph.D. in Educational Psychology, completed 2021.

A psychometric investigation of the conceptual structure of the revised National Survey of Student Engagement (NSSE 2.0)

- Victoria Narine, Ph.D. in Social Psychology, completed 2021. The role of hypermasculinity and social identity on student-athletes' academic performance
- George Smith, Ph.D. in Second Language Studies, completed 2020.

  An investigation of vocabulary size, metacognition, and individual differences in L2 listening comprehension
- Jenna Caparoso, Ph.D. in Educational (Educational Administration), completed 2020. Exploring whether and when:
  A longitudinal study of college time-to-completion
- Hubert Brumback, Ph.D. in Educational Psychology, completed 2019. Investigation of breath counting, abdominal breathing, and physiological responses in relation to cognitive load with students at the University of Hawai'i, Mānoa
- Daniel Zimbra, Ph.D. in Educational Psychology, completed 2018. A comparison of item response theory and structural equation modeling approaches for detecting item bias
- Sena Sanjines, Ph.D. in Educational Psychology, completed 2018.

  Does it make a difference? Data visualizations and the use of research and evaluation reports
- Brian Lawton, Ph.D. in Educational Psychology, completed 2017.

  Evidence about the convergent and discriminant validity of the components of fidelity of implementation in a science-teacher professional development project
- James Barry, Ph.D. in Education (Kinesiology), completed 2017. A descriptive survey of grant funded physical education teachers' knowledge, skills, and dispositions in adapted physical education

# Completed master's committee advising

- Anita Huang, M.Ed. in Educational Psychology, completed 2019.

  The influence of accelerated learning on college access for underrepresented students
- Torie Lewis, M.Ed. in Educational Psychology, completed 2018.

  Elements that contribute to a conducive environment for coming out as LGBTQ+ and the relationships among them

# Completed certificate advising

Victoria Narine, Measurement & Statistics Graduate Certificate in Educational Psychology, completed 2021. Evaluating the validity of inferences drawn from the Auburn Differential Hypermasculinity Inventory: Evidence from cognitive interviews

Olivia Uchima, Measurement & Statistics Graduate Certificate in Educational Psychology, completed 2019. An examination of the psychometric structure of the Modified Food and Attitudes and Behaviors survey for Native Hawaiians from Waimānalo

# Professional Development Workshops and Lectures

October 2020

Preparing a survey: Going from purpose to questions. 90-minute virtual brown-bag workshop for the UH Mānoa College of Education

May 2020

Introduction to R for education researchers. 90-minute virtual brown-bag workshop for the UH Mānoa College of Education

August 2018	Causal claims in educational research: Potential outcomes, RDDs, and CITSs. 90-minute workshop for faculty and staff of Curriculum Research & Development Group, Honolulu, HI
August 2018	Planning assessments. 90-minute workshop for teachers of the University Laboratory School, Honolulu, HI
October 2017	Going from purpose to questions: The process of planning a survey. 90-minute guest lecture for the UH Mānoa College of Education Educational Doctorate cohort, Honolulu, HI
September 2017	Developing survey scales. 90-minute guest lecture for the UH Mānoa Natural Resources & Environment Management department, Honolulu, HI
April 2017	Going from concept to questions: Developing an instrument blueprint. Invited half-day workshop for the Common Indicators & System Framework (CISF) Field Testing Project, Native Hawaiian Education Council, Honolulu, HI
September 2016	Using a validity argument to plan better surveys. Invited half-day workshop at the annual meeting of the Hawai'i-Pacific Evaluation Association, Kāne'ohe, HI.

# Refereed Publications

- Uchima, O. K., **Harrison**, G. M., Hwang, P. W., Ho-Lastimosa, I., & Chung-Do, J. J. (2021). Psychometric evidence of the Attitudes Toward Food Scale for Native Hawaiians [Accepted]. *Hawai'i Journal of Health & Social Welfare*.
- **Harrison**, G. M., & Azama, K. (2020). Survey research methods: Preparing for a validity argument. *Education in the Health Professions*, 3(3), 87–92. https://doi.org/10.4103/EHP.EHP 32 20
- **Harrison**, G. M. (2020). Validity evidence against the children's New Ecological Paradigm Scale. *The Journal of Environmental Education*, 51(1), 1–13. https://doi.org/10.1080/00958964.2019.1646202
- Harrison, G. M. & Vallin, L. M. (2018). Evaluating the Metacognitive Awareness Inventory using empirical factor-structure evidence. *Metacognition and Learning*, 13(1), 15–38. https://doi.org/10.1007/s11409-017-9176-z
- Duncan Seraphin, K., Harrison, G. M., Philippoff, J., Brandon, P. R., Nguyen, T. T. T., Lawton, B. E., & Vallin, L. M. (2017). Teaching aquatic science as inquiry through professional development: Teacher characteristics and student outcomes. Journal of Research in Science Teaching, 54 (9), 1219–1245. https://doi.org/10.1002/tea.21403
- Harrison, G. M. (2015). Non-numeric intrajudge consistency feedback in an Angoff procedure. *Journal of Educational Measurement*, 52(4), 399–418. https://doi.org/10.1111/jedm.12092
- Harrison, G. M., Duncan Seraphin, K., Philippoff, J., Vallin, L. M., & Brandon, P. R. (2015). Comparing models of nature of science dimensionality based on the Next Generation Science Standards. *International Journal of Science Education*, 37(8), 1321–1342. https://doi.org/10.1080/09500693.2015.1035357
- Brandon, P. R., Lawton, B. E., & **Harrison**, G. M. (2014). Issues of rigor and feasibility when observing the quality of program implementation: A case study. *Evaluation and Program Planning*, 44, 75–80. https://doi.org/10.1016/j.evalprogplan.2014.02.003
- Brandon, P. R., **Harrison**, G. M., & Lawton, B. E. (2013). SAS code for calculating intraclass correlation coefficients and effect size benchmarks for site-randomized education experiments. *American Journal of Evaluation*, 34(1), 85–90. https://doi.org/10.1177/1098214012466453
- Harrison, G. M. (2008). Student perceptions of foreign teacher expectations in Japanese universities. In K. Bradford-Watts (Ed.), JALT2007 conference proceedings (pp. 244–256). JALT. http://jalt-publications.org/archive/proceedings/2007/E025.pdf
- **Harrison**, G. M. (2007). Practicality and validity in three achievement tests of vocabulary. *OnCUE Journal*, 1(1), 39–54. http://jaltcue.org/journal\_1.1

# Other Publications

- Harrison, G. M. (2021). Validity arguments with survey research. In U. Luhanga & A. G. Harbaugh (Eds.), Basic elements of survey research in education:

  Addressing the problems your advisor never told you about (pp. 627–658).

  Information Age Publishing.
- Harrison, G. M. (2021, January). Getting started with R for survey analysis. http://go.hawaii.edu/8fJ
- Lewis, N. R., **Harrison**, G. M., Ah Sam, A. F., & Brandon, P. R. (2015). Evaluators' perspectives on research on evaluation. In P. R. Brandon (Ed.), *Research on Evaluation*. New Directions for Evaluation, 148, 89–102.

- Harrison, G. M. (2013). The effects of intrajudge consistency feedback in an Angoff standard-setting procedure (Publication No. 3577227) [Doctoral dissertation, University of Hawai'i at Mānoa]. ProQuest Dissertations and Theses
- **Harrison**, G. M. (2012). A SAS macro for estimating education-study statistical power parameters [Computer software code]. http://goo.gl/moLFl
- Harrison, G. M. (2006). Applying the theory of cultural intelligence to foreign language teaching: Some practicalities and challenges. *Studies in International Relations (Nihon University)*, 27, 399–420.
- Kikuchi, K. & **Harrison**, G. M. (2006). Using Internet and PowerPoint in the Japanese university EFL classroom context. *Conference proceedings of the 2006 Hawai'i International Conference on Education*. Hawai'i International Conference on Education, pp. 3370–3383.
- Harrison, G. M. (2005). Eliciting dialectical inquiry through examples of self-critique and use of irony. Studies in International Relations (Nihon University), 25, 309–331.
- Harrison, G. M. (2004). Predicted and observed difficulties of a Japanese learner of North American English Pronunciation. Studies in International Relations (Nihon University), 25, 167–190.

## Presentations

- Andersen, L. & Harrison, G. M. (2021, September). Supporting systems thinking and improvement in career and technical education: The CTE comprehensive local needs assessment [Evaluation report presentation]. Hawai'i Education Research Network, Honolulu, HI, United States.
- **Harrison**, G. M. (2019, April). Expanding the concept of validity in survey research [Roundtable presentation]. American Educational Research Association Annual Meeting, Toronto, Canada.
- Harrison, G. M. (2019, April). Validity evidence for using the children's New
   Ecological Paradigm Scale with high-school students [Paper presentation].
   American Educational Research Association Annual Meeting, Toronto, Canada.
- Harrison, G. M. (2018, October). Power your evaluation with R simulations [Demonstration]. Hawai'i-Pacific Evaluation Association Annual Meeting, Kāne'ohe, HI, United States.
- Harrison, G. M. (2017, January). The case for forced-choice format questionnaires to measure self-regulation [Paper presentation]. Hawai'i Educational Research Association Annual Conference, Honolulu, HI, United States.
- Harrison, G. M. (2016, November). Validity arguments for language program surveys [Workshop presentation]. The 42nd Annual International Conference on Language Teaching and Learning, Nagoya, Japan.
- Hollowell, J., & Harrison, G. M. (2016, November). Transformations in English entrance exams [Paper presentation]. The 42nd Annual International Conference on Language Teaching and Learning, Nagoya, Japan.
- Harrison, G. M. (2016, September). Using a validity argument to plan better surveys [Invited half-day workshop]. Hawai'i-Pacific Evaluation Association Annual Meeting, Kāne'ohe, HI, United States.
- Harrison, G. M. (2016, April). Switching between models to measure metacognition [Paper presentation]. Biennial International Objective Measurement Workshop, Washington, D.C.

- Harrison, G. M., & Vallin, L. M. (2016, April). Empirical evidence about the factor structure of the Metacognitive Awareness Inventory [Paper presentation]. American Educational Research Association Annual Meeting, Washington, D.C.
- Harrison, G. M., & Vallin, L. M. (2016, January). Empirical evidence about the factor structure of the Metacognitive Awareness Inventory [Paper presentation]. Hawai'i Educational Research Association Annual Conference, Honolulu, HI, United States.
- Harrison, G. M., Lewis, N., Ah Sam, F., & Brandon, P. R. (2015, November).
   Evaluators' perceptions of published research on evaluation [Paper presentation].
   American Evaluation Association Annual Conference, Chicago, IL, United States.
- Lewis, N., Ah Sam, F., **Harrison**, G. M., & Brandon, P. R. (2015, November). An increasing use of and involvement in research on evaluation: Preliminary report of evaluators' suggestions [Paper presentation]. American Evaluation Association Annual Conference, Chicago, IL, United States.
- Harrison, G. M., Lewis, N., & Brandon, P. R. (2015, September). Applying the theory of planned behavior to model evaluators' research-on-evaluation beliefs and involvement [Paper presentation]. Hawai'i-Pacific Evaluation Association Annual Meeting, Kāne'ohe, HI, United States.
- Lewis, N., **Harrison**, G. M., Ah Sam, F., & Brandon, P. R. (2014, September). Evaluators' perspectives on research on evaluation [Paper presentation]. Hawai'i-Pacific Evaluation Association Annual Meeting, Kāne'ohe, HI, United States.
- Harrison, G. M. (2014, April). The effects of intrajudge consistency feedback in an Angoff standard-setting procedure [Paper presentation]. National Council on Measurement in Education Annual Meeting, Philadelphia, PA, United States.
- Harrison, G. M. (2014, April). Modeling the dimensionality of nature-of-science understanding [Paper presentation]. Biennial International Objective Measurement Workshop, Philadelphia, PA, United States.
- Harrison, G. M., Vallin, L. M., Philippoff, J., Brandon, P. R., & Seraphin, K. (2014, April). Balancing development and measurement needs in an evaluation of a program under development [Roundtable presentation]. American Educational Research Association Annual Meeting, Philadelphia, PA, United States.
- Philippoff, J., Seraphin, K., Nguyen, T. T. T., **Harrison**, G. M., Vallin, L. M., & Brandon, P. R. (2014, April). Aquatic science, hybrid structure, and metacognitive strategies: Innovative aspects of a science professional development program [Paper presentation]. American Educational Research Association Annual Meeting, Philadelphia, PA, United States.
- Seraphin, K., Philippoff, J., **Harrison**, G. M., Vallin, L. M., Kaupp, L., Lawton, B. E., & Brandon, P. R. (2013, September). Effects of the Teaching Science as Inquiry (TSI) Aquatic professional development course for middle- and high-school teachers [Poster presentation]. Society for Research on Educational Effectiveness Fall 2013 Conference, Washington, DC.
- Harrison, G. M., Vallin, L. M., Philippoff, J., & Brandon, P. R. (2013, September).
  Balancing outcomes measurement demands with the complexities of program development [Roundtable presentation]. Hawai'i-Pacific Evaluation Association Annual Meeting, Kāne'ohe, HI, United States.
- Harrison, G. M. (2013, February). Rigor of performance standards by panelists with and without experience teaching examinees [Paper presentation]. Hawai'i Educational Research Association Annual Conference, Honolulu, HI, United States.

- Harrison, G. M., & Vallin, L. M. (2012, October). Developments in measuring teachers' knowledge and practice in teaching science as inquiry [Paper presentation]. American Evaluation Association Annual Conference, Minneapolis, MN, United States.
- Harrison, G. M. (2012, October). Charting L1 vocabulary growth with the Vocabulary Size Test: Rasch-based validation for L2 interpretation [Paper presentation]. Second Language Research Forum, Pittsburgh, PA, United States.
- Harrison, G. M., Vallin, L. M. & Brandon, P. R. (2012, September). Scoring teachers' responses to mini-vignettes for measuring professional-development effects [Roundtable presentation]. Hawai'i-Pacific Evaluation Association Annual Meeting, Kāne'ohe, HI, United States.
- Harrison, G. M., Brandon, P. R., & Lawton, B. E. (2012, April). Observing the quality of integrating the arts into elementary school reading instruction [Poster presentation]. American Educational Research Association Annual Conference, Vancouver, Canada.
- Seraphin, K., Philippoff, J., Kaupp, L. Lurie, M., Brandon, P. R., **Harrison**, G. M., Vallin, & L. M., Pottenger, F. (2012, February). *Impacting inquiry skills of students and teachers through an accessible professional development series in aquatic science* [Symposium]. Hawai'i Educational Research Association Annual Conference, Honolulu, HI, United States.
- Brandon, P. R., **Harrison**, G. M., & Lawton, B. (2011, November). *Intraclass correlation coefficients and effect sizes for planning school-randomized experiments* [Paper presentation]. American Evaluation Association's Annual Conference, Anaheim, CA, United States.
- Harrison, G. M., & Brandon, P. R. (2010, September). Statistics for planning school-randomized experiments in Hawaii [Poster presentation]. Hawaii-Pacific Evaluation Association Annual Meeting, Honolulu, HI, United States.
- Harrison, G. M. (2007, November). Challenging the "Students don't know" explanation [Paper presentation]. The 33rd Annual International Conference on Language Teaching and Learning, Tokyo, Japan.
- Hollowell, J., Uehara, Y., **Harrison**, G. M., & Evans, A. (2007, November). *Language program evaluation perspectives* [Workshop presentation]. The 33rd Annual International Conference on Language Teaching and Learning, Tokyo, Japan.
- Kikuchi, K., & Harrison, G. M. (2006, January). Using Internet and PowerPoint in the Japanese university EFL classroom context [Paper presentation]. Hawai'i International Conference on Education, Honolulu, HI, United States.
- Harrison, G. M. (2005, October). Challenges in student-student relations in negotiating a syllabus [Paper presentation]. Temple University Applied Linguistics Colloquium, Tokyo, Japan.
- **Harrison**, G. M. (2002, March). *Critical pedagogy in the ESL classroom* [Workshop presentation]. Hawaii TESOL Conference, Kāne'ohe, HI, United States.

# Reports

- Harrison, G. M., Andersen, L., Ho, K. M., Miller, S., & Miles, N. (2021).
  Comprehensive local needs assessment to inform the state of Hawai'i's Perkins V planning. University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Harrison, G. M. (2019). Meta-evaluation of the comprehensive needs assessment to inform the state of Hawai'i's application for Perkins V funding. University of Hawai'i at Mānoa, Curriculum Research & Development Group.

- Harrison, G. M., Suzuka, K. M., & Goto, K. (2019). Comprehensive needs assessment to inform the State of Hawaii's application for Perkins V funding. University of Hawaii at Mānoa, Curriculum Research & Development Group.
- Harrison, G. M., Vallin, L. M., Lawton, B. E., Philippoff, J., Duncan Seraphin, K., & Brandon, P. R. (2014). Evaluation plan and methods. In K. Duncan Seraphin (Ed.), Accessible professional development for teaching aquatic science inquiry: Final report (pp. 71–108). University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Harrison, G. M., Vallin, L. M., Lawton, B. E., Philippoff, J., Duncan Seraphin, K., & Brandon, P. R. (2014). Summary of the findings for each evaluation question. In K. Duncan Seraphin (Ed.), Accessible professional development for teaching aquatic science inquiry: Final report (pp. 108–122). University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Lawton, B. E., **Harrison**, G. M., Baldwin, M. P. H., & Nguyen, T. T. T. (2014). Academy for 21st Century Education and Run Book Project Spring 2014 Evaluation Report. University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Lawton, B. E., **Harrison**, G. M., & Brandon, P. R. (2014). Academy for 21st Century Education and Run Book Project Fall 2013 Evaluation Report. University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Lawton, B. E., **Harrison**, G. M., Vallin, L. M., & Philippoff, J. (2013).

  Hawai'i-Pacific Evaluation Association (H–PEA) 2012 Conference and

  Pre-conference Evaluation Report. http://h-pea.org/2012/evaluation\_report.pdf
- Harrison, G. M., Brandon, P. R., Vallin, L. M., Seraphin, K. D, & Philippoff, J. (2013). The Teaching Science as Inquiry-Aquatic project in 2011–2012: A report for participating Hawai'i Island teachers. University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Harrison, G. M., Brandon, P. R., Vallin, L. M., Seraphin, K. D, & Philippoff, J. (2013). The Teaching Science as Inquiry-Aquatic project in 2011–2012: A report for participating Maui County teachers. University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Harrison, G. M., Brandon, P. R., Vallin, L. M., Seraphin, K. D, & Philippoff, J. (2013). The Teaching Science as Inquiry-Aquatic project in 2010–2012: A report for participating O'ahu teachers. University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Brandon, P. R., **Harrison**, G. M., Vallin, L. M., & Delise, D. (2011). Evaluation plan for the Curriculum Research & Development Group project, "Accessible Professional Development for Teaching Aquatic Science Inquiry" (Institute of Education Sciences Grant No. R305A100091). University of Hawai'i at Mānoa, Curriculum Research & Development Group.
- Brandon, P. R., **Harrison**, G. M., & Vallin, L. M. (2010). Evaluation of the final year (2009–2010) of the Arts and Literacy for All project. University of Hawai'i at Mānoa, Curriculum Research & Development Group.

# **External Funding Applications**

Under review

Wilson, M. et al. (PREL). Regional Educational Laboratory Pacific. US Department of Education, Institute for Education Sciences. Submitted April 2021. \$1,040,639 requested. 25% contribution as Key Person

### Unfunded, first authored

# Science Foundation—Discovery Research PreK-12 (DRK-12) program. Submitted November 2019. \$449,491 requested. 70%

contribution as Principal Investigator

Awarded

Seder, R., B. Dougherty, & G. Harrison. Review and Revision of the NSTT Core Subject Content Assessment. Federated States of Micronesia—Department of Education. Submitted December 2017. \$138,591 awarded based on merit, but then rescinded one month later because of fiscal disagreements between the FSM government and the University of Hawai'i at Mānoa. 30% contribution as Co-Principal Investigator.

Mathematics Formative-Assessment Validation Skills. National

G. Harrison, Venenciano, L., & S. Yagi. Mapping Teachers'

Nguyen, T. T., G. Harrison, B. Lawton, & M. Baldwin (2013–2014). Continued Professional Development for Access Learning Schools, Hawaii Department of Education. Submitted in 2012. \$329,737, funded. 20% contribution as the lead evaluator.

# Evaluation and Assessment Projects

Sep 2020–Jun 2021 Funding: \$126,322 by the Office of the State Director for Career and Technical Education

Jun 2017-Aug 2020

Lead Evaluator of the Comprehensive Local Needs Assessment of the State of Hawaii's implementation of the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), implemented by the Curriculum Research & Development Group at the College of Education at the University of Hawai'i at Mānoa.

Lead Investigator of the Measuring the Quality of Professional Development effort, implemented by the Curriculum Research & Development Group at the College of Education at the University of Hawai'i at Mānoa.

Jan 2019–Aug 2019 Funded through salary savings (0.50 FTE) by Perkins V through the Office of the State Director for Career and Technical Education May 2015-Dec 2017

Lead Evaluator of the Comprehensive Needs Assessment to Inform the State of Hawaii's Application for Perkins V Funding, implemented by the Curriculum Research & Development Group at the College of Education at the University of Hawai'i at Manoa.

Jun 2015-Jun 2016

Funding: \$30,000 by the Hawai'i Community Foundation

Jan 2014-May 2015

Lead Investigator for the Student Perceptions of Ecology and Nature project implemented by the Curriculum Research & Development Group at the College of Education at the University of Hawai'i at Mānoa and conducted with faculty from Dankook University, Yongin, South Korea.

Lead Investigator for the assessment component of the Social and Emotional Learning and School Climate Project, implemented by the University Laboratory School. Adapted a situational judgment test to help the project conduct its own evaluation in middle- and high-school contexts.

Lead Investigator of the Measuring Nature-of-science Understanding project, implemented by the Curriculum Research & Development Group at the College of Education at the University of Hawai'i at Mānoa.

Sep 2013–July 2014 Funding: \$329,737 by the Hawaii Department of Education

Jul 2010–Feb 2014
Funding: \$1,485,763 by the
Institute of Education
Sciences, U.S. Department of
Education (Grant No.
R305A100091)

Jan 2010–Dec 2010
Funding: \$315,000 by the
Arts in Education Model
Development and
Dissemination Program, U.S.
Department of Education

Co-Principal Investigator to evaluate the *Continued Professional Development for Access Learning Schools*, implemented by the University of Hawai'i at Mānoa. Developed, administered, and analyzed questionnaires, interviews, and focus-groups to evaluate the success of the technology professional development series provided to teachers, technology coordinators, and administrators.

Program Evaluation and Research Manager for the Accessible
Professional Development for Teaching Aquatic Science Inquiry
project, implemented by the University of Hawai'i at Mānoa.
Managed and conducted evaluation activities, which included the
following: Collaboration in planning and scheduling the
evaluation activities, leading instrument development activities,
collecting and analyzing data, managing the database, supervising
graduate assistants, writing formative and summative reports,
and preparing manuscripts for publication.

Program Evaluation Assistant for the final year of the Arts and Literacy for All project, implemented by the Hawai'i Arts Alliance. Conducted evaluation research using observations, interviews, and student outcome data. Conducted validity research on assessment of quality of implementation in the classroom.

# Professional Development

#### **Memberships**

American Educational Research Association (AERA) SIGs:

Division D, Measurement and Research Methodology Survey Research

Hawai'i Educational Research Association (HERA) Hawai'i-Pacific Evaluation Association (H-PEA) National Council on Measurement in Education (NCME) Society for Research on Educational Effectiveness (SREE)

## Methods-based University Coursework

Categorical Data Analysis (University of Hawai'i at Mānoa) Spring 2015

Hierarchical Linear Modeling (University of Hawai'i at Mānoa) Spring 2010

Item Response Models (University of Hawai'i at Mānoa) Fall 2009 Measurement and Evaluation (University of Hawai'i at Mānoa) Spring 2009

Structural Equation Modeling (University of Hawai'i at Mānoa) Spring 2009

Multivariate Methods (University of Hawai'i at Mānoa) Fall 2008 Second Language Qualitative Research (University of Hawai'i at Mānoa) Fall 2008

Multiple Regression in Behavioral Research (University of Hawai'i at Mānoa) Spring 2008

Intro to Quantitative Methods (University of Hawai'i at Mānoa) Fall 2007

Second Language Research Methods (Temple University Japan) Summer 2006

Second Language Testing (University of Hawai'i at Mānoa) Spring 2001

## Methods-based Workshops and Short Courses

What Works Clearinghouse Group Design Standards Training (Institute of Education Sciences of the U.S. Department of Education; Mar 2021)

Longitudinal Data Analysis Seminar (University of Hawai'i at Mānoa; Spring 2020)

Quasi-Experimental Design and Analysis workshop (two-week summer research training institute provided by the Institute for Policy Research at Northwestern University and sponsored by the Institute of Education Sciences of the U.S. Department of Education; Aug 2016)

Carnegie Improvement Science in Practice workshop (three-day workshop by the Carnegie Foundation for the Advancement of Teaching; Dec 2015)

Propensity Score Matching: Theories and Applications (American Evaluation Association one-day workshop; Nov 2015)

Actionable Evaluation: Evaluative Reasoning and Practical Methodology (Hawai'i-Pacific Evaluation Association one-day workshop; Sep 2015)

R for Statistical Analysis (Statistics.com online course; Jul–Aug 2015)

Cluster-Randomized Trials (two-week summer research training institute provided by the Institute for Policy Research at Northwestern University and sponsored by the Institute of Education Sciences of the U.S. Department of Education; Jul 2014)

Beginning Developmental Evaluation (American Evaluation Association eStudy041; Apr 2014)

ConQuest Workshop (Workshop on multidimensional item-response modeling, at the biennial International Objective Measurement Workshop; Apr 2014)

- Intervention Fidelity: Models, Methods, and Applications (Society for Research on Educational Effectiveness one day workshop; Sep 2013)
- Improving Generalizations from Experiments: New Methods (Society for Research on Educational Effectiveness half day workshop; Sep 2013)
- Applied Mixed Models (American Statistical Association two-day workshop; Jun 2013)
- Experimental and Quasi-experimental Research Design for Evaluators (American Evaluation Association one-day workshop; Oct 2012)
- Using Effect Size and Association Measures in Evaluation (American Evaluation Association one-day workshop; Oct 2012)
- Practical Program Design: Principles and Tools for Evaluators (Sessions 1 and 2 with Steward Donaldson and John Gargani) (Hawai'i-Pacific Evaluation Association one-day workshop; Sep 2012)
- Practical Rasch Measurement: Further Topics (Statistics.com online course; Jul-Aug 2012)
- Social & Behavioral Research—Basic/Refresher Curriculum [Collaborative Institutional Training Initiative (CITI) online course; Jun 2011]
- Programming I: SAS Essentials (Destiny Virtual Learning, 2010)
- Programming II: Data Manipulation Using the Data Step (Destiny Virtual Learning, 2010)
- Macros in SAS Software (Destiny Virtual Learning, 2010)
- Participatory Evaluation Up Close (Hawai'i-Pacific Evaluation Association one-day workshop; Sep 2010)
- Case Studies, Causality, and Hawaiian Connections (Hawai'i-Pacific Evaluation Association one-day workshop; Sep 2010)
- Many Facets Rasch Measurement (Statistics.com online course; Oct–Nov 2009)
- Introduction to Rasch Measurement (Temple University two-day seminar, Japan; Nov 2006)

## Awards

Teaching

Nominated for the 2020–2021 Excellence in Teaching Award, University of Hawai'i at Mānoa's College of Education. (Nov 2020).

Research

Distinguished paper award, for "Empirical Evidence About the Factor Structure of the Metacognitive Awareness Inventory," co-authored by Lisa Vallin, awarded by the Hawai'i Educational Research Association. (Jan 2016) \$500.

#### Travel Research

Travel Award from Faculty Research Travel Fund, awarded by the University of Hawai'i University Research Council. (Feb 2018) \$1,700.

Travel Award from Faculty Research Travel Fund, awarded by the University of Hawai'i University Research Council. (Feb 2016) \$1,500.

Travel Award from Research & Training, awarded by the University of Hawai'i University Research Council. (Feb 2014) \$2,000.

# Service

### University and Other Higher-education Service

Faculty Service

Faculty mentor to new College of Education faculty member (Oct 2019–May 2020)

Faculty Search Committee Member, Curriculum Research & Development Group, University of Hawai'i at Mānoa: Served on committee to search for a new science education faculty member (Dec 2018–Mar 2019)

Faculty Search Committee Member, Curriculum Research & Development Group, University of Hawai'i at Mānoa: Served on committee to search for a new CRDG director (Dec 2016–Mar 2017)

Faculty Search Committee Chair, Curriculum Research & Development Group, University of Hawai'i at Mānoa: Chaired committee to search for new science education faculty member (Nov 2015–Mar 2016)

Policy Service

Senator on UH Mānoa's College of Education Senate, representing the department of Educational Psychology (Aug 2021–present)

Member of the Committee on Curriculum and Program Planning, College of Education (Aug 2021–present)

Partnership Coordinating Council, College of Education, University of Hawai'i at Mānoa: Serving on the council to assist in monitoring of the agreement between a local school board (of the University Laboratory School) and the University of Hawai'i's College of Education (Sep 2016–present)

- Senate Alternate on UH Mānoa's College of Education Senate, representing Curriculum Research & Development Group (Aug 2020–July 2021)
- Department Personnel Committee, Curriculum Research & Development Group, University of Hawai'i at Mānoa: Serve as vice-chair in reviewing and editing the department's policies and in making use of those policies to make department decisions (Aug 2019–July 2021)
- Leadership Council, Curriculum Research & Development Group, University of Hawai'i at Mānoa: Serving as representative of the evaluation team in reviewing and addressing the department's policies and decisions in regard to the university (Aug 2015–July 2021)
- Department Personnel Committee, Curriculum Research & Development Group, University of Hawai'i at Mānoa: Participating in reviewing and editing the department's policies and in making use of those policies to make department decisions (Feb 2011–May 2018)
- Institutional Learning Objectives Implementation Committee, University of Hawai'i at Mānoa: Participated in efforts to implement the university's institutional learning objectives (ILOs), including drafting policy documents, conveying to stakeholders what the ILOs are, and helping programs map ILOs to their curriculum (Feb-Apr 2014)

stakeholders what the ILOs are, and helping programs map ILO to their curriculum (Feb–Apr 2014)

Committee on Educational Effectiveness, University of Hawai'i at Mānoa: Serve as faculty representative to analyze, review, and suggest edits of the university's assessment policies; providing

reports (Oct 2020–present)

Course Evaluation System Committee, University of Hawai'i at

Mānoa: Provided survey methodology advice to the committee,
which was led by the Associate Vice Chancellor for Academic
Affairs, in their development of the online course evaluation
system (Apr 2016–Mar 2017)

feedback to university programs on their annual assessment

- Mānoa Assessment Committee, University of Hawai'i at Mānoa: Served as faculty representative to analyze, review, and suggest edits of the university's assessment policies; providing feedback to university programs on their annual assessment reports (Feb 2012–May 2016)
- Assessment Leadership Institute, Assessment Office, University of Hawai'i at Mānoa: Reviewed applications for the 2016 institute (Apr 2016)
- Assessment for Curricular Improvement Poster Exhibit, University of Hawai'i at Mānoa: Reviewed poster session proposals for the annual exhibit (Feb 2015)
- Smarter Balanced Assessment Consortium's Online Panel to set Common Core State Standards for the high school English Language Arts section of the assessments: Served as a standard setting panelist (Oct 2014)

Assessment & Survey Service

- Mānoa Assessment Office, University of Hawai'i at Mānoa: Reviewed poster proposals for the Assessment for the 2014 Curricular Improvement Poster Exhibit, where UHM programs share experiences on planning, collecting, and using assessment data for program improvement (Mar 2014)
- Assessment Test Scoring Session, Tennessee Technological University's piloting of the Critical Thinking Assessment Test: Scored and provided feedback on the test (Sep 2013)
- Written Communication Faculty Study Group, University of Hawai'i at Mānoa: Evaluated and participated in faculty discussion on student writing samples to assist the Assessment Office in identifying examples of student writing for future assessment projects in the university (May 2013)
- Mānoa Assessment Committee, University of Hawai'i at Mānoa: Participated, as the Graduate Student Organization representative, in faculty meetings on the university's assessment policies (Sep 2010–Jan 2011)
- Department of Second Language Studies, University of Hawai'i at Mānoa: Served as a performance assessment rater on the oral interview section of the EIKEN (Test in Practical English Proficiency) Grade 1 test (Oct 2009)

**Evaluation Service** 

- Macro-Micro Biology Research Group, University Laboratory School, Biology Department, Honolulu, HI: Consulted the Biology Department Chair in further planning a quasi-experimental study of inquiry-based biology teaching; examined preliminary data and provided feedback on instrument quality (Sep 2013–Apr 2014)
- College of Education, University of Hawai'i at Mānoa: Provided consultation to the Master of Education in Teaching (MEdT) planning committee in their evaluation of their new online program (Mar 2014)
- Writing Center, University of Hawai'i at Mānoa: Assisted the unit's director in analyzing pre and post data of students' confidence in academic subjects (Jul 2012)

Manual Service

College of Education Fellowship Committee, University of Hawaiʻi at Mānoa: Assisted in setting up COE congress meetings (Dec, May 2012)

English Language Education Service

- Outreach College, University of Hawai'i at Mānoa: Taught two short-term intensive English courses in Japan for the Japan Summer Program at Nihon University; students were professionals from the community and high school and university students (Aug 2008)
- Nihon University Mishima Testing Committee: Served in developing the English section of the university's entrance exams (Apr 2005–Mar 2007)
- KokoroExchange International, Mishima, Japan: Wrote example sentences for a mobile phone-based vocabulary study course. (Mar 2005)
- ESL Writing Lab Tutor at Contra Costa College, California: Tutored students in writing and grammar (weekly sessions for two semesters) (Jan–Dec 2003)

Multimedia Computer Lab Monitor at University of Hawai'i at
Mānoa: Assisted instructors and students in their use of
technology in language courses (Jan–Dec 2002)

Center for Asia-Pacific Exchange (CAPE), English Language Program, Honolulu: Taught intensive English content-based skills course to visiting Japanese and Korean university students (under Dr. Jai-Ho Yoo) (Jul-Aug 2002)

#### **Local Community Service**

Assessment & Survey Service

Hawaii Department of Education: Served as a technical advisor for the Kaiapuni Assessment of Educational Outcomes (Hawaiian Language Immersion Assessment Project), which developed Hawaiian language assessments in mathematics, language arts, and science to align with the state's existing standards and meet federal requirements (Aug 2014–Dec 2017)

Common Indicators & System Framework (CISF) Field Testing Project, Native Hawaiian Education Council, Honolulu, HI: Delivered an invited workshop on how to develop an instrument blueprint for surveys (Apr 2017)

Hawaii Department of Education: Served on the science and reading panels for reviewing fairness of items on the Hawaii State Assessment (Jul 2012)

Hawaii Department of Education: Served on a panel to set standards for Hawai'i's Title III NCLB requirements for English language learners (Mar 2011)

Hawaii Department of Education and American Institutes for Research: Served on the panel for setting cut-scores on the Grades 3–5 reading section of the Hawaii State Assessment (Jul 2010)

Evaluation Service

Utilization of Publicly Available Data Sources in Hawaii project,
McREL International, Honolulu, HI: Helped establish criteria for
reviewing concept papers in a competition for research utilizing
publicly available data in Hawai'i (Feb 2014–Aug 2014)

Hawai'i-Pacific Evaluation Association: Conducted the conference evaluation of the 2012 annual H-PEA conference (Nov 2012)

#### Local Conference Service

 ${\rm Dec}\ 2016\ \&\ 2019$ 

Hawai'i Educational Research Association: Reviewed distinguished-paper-award submissions and regular paper proposals for the 2017 & 2020 HERA conferences

Jun 2018, 2013, 2012, & 2011

Hawai'i-Pacific Evaluation Association: Reviewed presentation proposals for the annual H-PEA conferences

Dec 2012

Hawai'i Educational Research Association: Reviewed proposals for the 2013 HERA conference

Sep 2012

Hawai'i-Pacific Evaluation Association: Registration volunteer at the 2012 annual H-PEA conference

#### **National Conference Service**

Apr 2020

American Evaluation Association: Reviewed 3 conference proposals for the 2020 annual meeting

Aug 2019

American Educational Research Association: Reviewed 15 conference proposals for the 2020 annual meeting

Apr 2019	American Educational Research Association: Served as a discussant for the distinguished paper session of the the Consortium of State and Regional Educational Research Associations		
Apr 2014	National Council on Measurement in Education: Chaired paper session on Angoff standard setting for the 2014 annual meeting		
Aug 2013	American Educational Research Association, Division H, Sections 1 and 3: Reviewed 19 proposals for the 2014 annual meeting		
Mar 2013	Pacific Circle Consortium: Reviewed proposals and served on the Program Subcommittee for the 2013 annual PCC conference		
Oct 2012	National Council on Measurement in Education: Reviewed 4 proposals for the 2013 NCME conference		
Oct 2012	Second Language Research Forum: Chaired sessions at the 2012 SLRF conference		
Nov 2009	National Council on Measurement in Education Graduate Student Issues Committee: Reviewed Graduate Student Poster Session proposals for the 2010 NCME conference		
Publication Review Service			
Review boards	International review board of Journal of Environmental Education, since 2020		
	Editorial review board of OnCue Journal, since 2014		
Reviews			
2021	Journal of Environmental Education (1 review) Metacognition and Learning (1 review)		
2020	Journal of Environmental Education (1 review)		
	International Journal of STEM Education (2 reviews)  Metacognition and Learning (3 reviews)		
2019	Statistics for people who (think they) hate statistics—with R (book		
	review)		
2018	Journal of Educational Measurement (4 reviews)		
	American Journal of Evaluation (1 review)  Journal of Research in Science Teaching (2 reviews)		
	OnCue Journal, Japan Association for Language Teaching (1 review)		
2017	Journal of Educational Measurement (1 review)		
	Journal of Research in Science Teaching (1 review)		
2016	OnCue Journal, Japan Association for Language Teaching (1 review)		
2016	Educational Assessment (1 review)  Journal of Educational Measurement (3 reviews)		
	Journal of Research in Science Teaching (1 review)		
	OnCue Journal, Japan Association for Language Teaching (1 review)		
2015	New Directions for Evaluation (1 review)		
	OnCue Journal, Japan Association for Language Teaching (2 reviews)		
2014	American Journal of Evaluation (1 review)		
	OnCue Journal, Japan Association for Language Teaching (1 review)		
	Sage Open (1 review)		