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February 22, 2022

To the George Cobb Lifetime Achievement Award in Statistics Education Review Committee:

TACOMA, WA 98447

It is an honor and privilege to nominate our friend and colleague, Robert (Bob) Claude delMas, for the George Cobb Lifetime Achievement Award in Statistics Education. Bob has contributed to the field of statistics education for over 25 years. His work and service have impacted many people, from the numerous undergraduate and graduate students he teaches, to the educators who have benefitted from the tools and assessments he has developed and shared, to the researchers and advisees who have drawn and learned from his work and mentoring. It is no surprise that Bob has won prestigious teaching awards at the University of Minnesota, nor that he was recognized by the ASA when he was made a fellow in 2010.

Overview of scholarly work. Bob's unique background in cognitive psychology combined with his knowledge of statistics, and natural curiosity about student learning have led him to make profound contributions to undergraduate and graduate statistics education practice through high-quality and relevant research. Bob's research has influenced statistics educators and statistics education researchers, as well as many undergraduate and graduate students whose statistical reasoning and thinking have been developed by his research-based teaching methods. Google Scholar counts over 3000 citations of Bob's research! His work is characterized by the way he deeply examines difficult concepts related to how students think and learn about statistics. Two main areas of his research are (1) understanding and developing statistical reasoning, particularly through the use of simulation, and (2) assessment of statistical learning outcomes.

Understanding and developing statistical reasoning. Early in his career, Bob's interest in understanding students' reasoning about sampling distributions led him to develop Sampling Sim, an interactive program that used simulation to teach ideas underlying sampling distributions. Funded by an NSF project called *Teaching and Assessing Statistical Inference* (with Joan Garfield and Beth Chance), Bob studied how the Sampling Sim program could be used to develop students' statistical reasoning. This work, along with the development of subsequent tools to study students' thinking about variation and statistical inference, has provided insights into how to best structure learning activities and assess student understanding. Beth Chance writes about her experiences working with Bob on this project, saying, "It was so fun to... say 'wouldn't it be great if we had software that would do this for the students' and he would create it-across several different programming languages!" She adds, "He was always finding new ways to dig deeper into student understanding and to understand how students interacted with the tools and how to improve the tools based on that feedback. I learned so much from him and Joan about listening and watching students and really hearing/seeing their learning as it developed... Bob was never afraid to 'think outside the box,' challenging the status quo/tying in cognitive theory about how students learn, and the statistics education community is much the better for it!" Beth added that her experiences with Bob informed her work on the Rossman-Chance applet collection.

Bob's research in this area also informed the NSF-funded AIMS and CATALST curriculums. Activities from the AIMS project are still widely used (especially at community colleges), and the CATALST curriculum (a pioneering curriculum that uses simulation-based methods for statistical inference) has been adopted at several universities and high schools.

Assessment in Statistics Education. One of Bob's unique contributions has been his work related to assessment, including the multi-year NSF funded Assessment Resource Tools for Improving Statistical Thinking (ARTIST) project (with Joan Garfield). The project involved creating the CAOS test and the online ARTIST assessment database. The CAOS test has been given to more than 50,000 students and has been used by nearly 250 instructors (from 170

institutions) to help understand students' statistical reasoning. This assessment has also been of great benefit to statistics education researchers, many who have used CAOS in their own research. (It has been used in 60+ scholarly papers, nearly 30 theses, and cited in many more.) The other assessment resources found on the ARTIST website are also widely used (if word of mouth is to be believed; the usage is not tracked). In addition, the topic-area assessments have formed the building blocks for other research-based assessments. This work inspired an assessment conference (ARTIST conference, 2004) that led to the several collaborations and publications.

Bob has continued his work in developing and promoting "good" assessment throughout his career. He was a major contributor to the both the STI and GOALS assessments, which were developed as part of the *Evaluation and Assessment of Teaching and Learning About Statistics* (e-ATLAS) project that built on and updated CAOS. More recently, as a co-PI on the *Levels of Conceptual Understanding in Statistics* (LOCUS) project, Bob worked with Tim Jaccobe to develop assessments of students' statistical understanding that measure development in topics identified and promoted in the Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report.

Mentoring. In addition to his scholarly work, Bob has positively influenced the careers of many statistics educators and researchers. This is, perhaps, most evident in his role as a Ph.D. advisor for several statistics education students at the University of Minnesota, and in his role serving on committees for students at other institutions and in other countries. One of Bob's students, Ethan Brown, describes Bob as "a hidden champion on many research projects and for many emerging statistics education researchers." Another advisee, Jonathan Brown, comments, "His kindness, patience, and willingness to refine my ideas over countless meetings has been unmatched... I've treasured our time together in our meetings, both formal and informal: they have advanced the state of scholarship in statistics education and provided me with holistic support... Put simply, I leave every meeting with Bob with a fuller brain and a fuller heart."

Bob's mentorship extends far beyond his doctoral students to his over 50 co-authors. From his active participation in the research process, to his constructive feedback during the editing process, Bob is mentoring those he works with, even when it may not seem explicit. For example, when co-authoring "Every Rose Has Its Thorn: Secondary Teachers' Reasoning about Statistical Modeling," a paper that appeared in *ZDM Mathematics Education*, Bob helped Nicola Justice and Mike Huberty, two novice statistics education researchers, learn how to respond to editor feedback—at times making changes while standing firm when suggestions were not appropriate. Matt Beckman, one of Bob's former PhD students and an emerging leader in statistics education at Penn State University, reflects on his experiences co-authoring with Bob, saying, "Bob has gently and skillfully brought me along from apprentice to colleague. I can only describe it as a deepseated, honest humility that good ideas can come from anywhere—even when he's clearly the expert in the room. I think one of the reasons that Bob has been so productive is that he sees what needs to be done and just does it with excellence."

This lead-by-example style that Bob embodies is apparent in his outreach and service to the broader statistics education community. While collaborating with three doctoral students to give a CATALST workshop at USCOTS 2013, Bob not only helped the workshop attendees experience new technology and an innovative curriculum, but also helped his students learn how to organize and lead a workshop, and share ideas with the other statistics educators.

Teacher Development. Bob has also supported teacher preparation and teacher development in statistics education. As a co-PI on the Statistics Teachers Educational Practice Survey (STEPS) grant, he helped to develop a survey that could be used to learn about current practices of teachers teaching statistics at the undergraduate level. This survey set foundations for the more current Statistics Teaching Inventory (STI) survey instrument, which is still being used today to take the temperature of the undergraduate statistics teaching community on important issues and topics. He has also contributed to teacher development through numerous workshops, disseminating new research-based ideas and teaching techniques. At the high school level, Bob has

participated in research on how mathematics teachers understand statistical modeling, more recently even venturing into new areas of how teachers can learn modern data science topics such as classification trees.

Bob has also helped develop and teach several statistics education seminar courses designed to help grow and develop excellent statistics teaching. For example, he co-taught a course in which graduate students explored best practices for teaching statistics, including innovations in content, pedagogy, and technology. Students from across the University of Minnesota took this course (which was later offered in collaboration with Penn State University) and reported how it greatly improved their knowledge and ability to teach statistics well.

International Leadership. Bob served the statistics education community as associate editor of the Journal of Statistics Education for nearly ten years (2001–2010) and immediately after that as editor of the Statistics Education Research Journal, the premier research journal of our field, for four years. As editor, Bob played the role of mentor looking at the potential for scholars' work to contribute to the growing knowledge about teaching and learning statistics. He often provided detailed and valuable feedback to authors that not only helped them publish their work, but also raised standards of excellence and rigor in statistics education research. Even when rejecting papers, Bob went above and beyond, helping writers understand where the deficiencies were so they could improve and resubmit their manuscripts.

Bob has also helped grow the international community of scholars and educators, making connections with and mentoring statistics educators from other parts of the world. He was a founding member of the *International Forum on Statistical Reasoning Thinking and Literacy* (SRTL), which meets every two years to immerse in questions of statistics education research. On several occasions, Bob traveled to Japan to help nurture colleague Kazunori Yamaguchi's interest in statistics education. Kazunori states that Bob "continued to visit Japan and introduced us to the results of their projects and other activities... Bob's contribution to the reform of statistical education in Japan has been great." Bob also has mentored statistics educators from Costa Rica, hosting them in Minnesota and traveling there to encourage their work in statistics education.

In summary, Bob's research has been devoted to deep, authentic investigations that have brought new insights and opened up new lines of inquiry in statistics education. Bob has influenced how statistics is taught and assessed, and has paved the way for many other researchers to build on his work. And, similar to the award's namesake, George Cobb, Bob's mentoring and leadership have influenced these scholars just as much as his intellectual contributions. Even as he readies for retirement and the next chapter in his life, Bob continues to contribute his time and knowledge to mentoring early career scholars and promoting statistics education research.

Sincerely,

Nicola Justice, Ph.D. Assistant Professor

Mathematics Department

Pacific Lutheran University

Andrew Zieffler, Ph.D.

Senior Lecturer

Educational Psychology University of Minnesota Elizabeth Fry, Ph.D. Assistant Professor

Mathematics Department St. Catherine University



March 8, 2021

Dear Colleague:

I write in nomination of Dr. Robert (Bob) delMas for the George Cobb Lifetime Achievement Award. It is my observation that Dr. delMas has made lasting contributions to the field of statistics education and the teaching and learning of college-level statistics. My perspective is shaped mainly by the extent of NSF-funded projects that Dr. delMas has either been Principal Investigator or Co-Principal Investigator with. These projects have had quite an impact on the statistical education community. I will focus my remarks on two projects.

The ARTIST project (NSF DUE-0206571) changed the way I think about assessment for statistics education. Prior to that point I believed that multiple choice questions indicated a professor was being lazy. That might be true for calculation-based questions, but that project taught me that I could ask very deep conceptual questions in a multiple-choice format. I do not think I was alone in having that revelation from that project. I used the ARTIST database and interface of assessment items that Bob was instrumental in creating and maintaining for years as I crafted quizzes and examinations. I took the tools I learned from that work and used them to modify and update the ARTIST items to fit my own needs. However, it was Bob's vision for that tool that had a major influence on my teaching for years.

The CATALST (NSF DUE-0814433) project was another project that I thought was simply brilliant in its design and execution. Bob, with Joan Garfield and Andy Zieffler, among others, designed a course that taught the concepts of introductory statistics in an engaging way that emphasized randomization. Using Modeling Eliciting Activities (MEAs), the course combined active learning with technology to have students work in teams that led to understanding deep concepts. One unique feature of that curriculum was its emphasis on understanding probability in the beginning. I think this is something that is important for all understandings of significance in statistics education.

For both of these projects, Bob was involved in the dissemination of the results and worked with educators from around the country and the world. Bob's work in dissemination of ideas is incredible. He has published over 30 refereed journal articles, 9 contributions to books, almost 20 conference proceedings, and nearly 100 conference presentations. Plus, there are over 40 additional webinar and presentations.

Simply put, Dr. Robert (Bob) delMas has been a global ambassador of deep thinking about teaching statistical ideas for decades. His impact on the field can be measured by how many educators his work has touched in meaningful and profound ways.

Sincerely,

Dr. John Holcomb

Interim Vice Provost of Academic Programs Interim Dean, College of Graduate Studies

Cleveland State University



March 3, 2021

Dear Members of the George Cobb Lifetime Achievement Award Selection Committee,

It is a sincere honor and privilege to write this letter in support of Dr. Bob delMas' nomination for the George Cobb Lifetime Achievement Award in Statistics Education. I can think of no one who deserves this award more than Bob. He has made a significant impact on the field of statistics education at both the undergraduate and K-12 level.

Bob's impact on assessment at the undergraduate level cannot be overstated given the tremendous impact the ARTIST project, assessments, and ultimately the website have had on the field of the assessment of statistics at the undergraduate level. Assessments can be a driving force behind curricula change as they represent what is valued in an educational experience. Teachers assess what they value. The ARTIST assessments helped shift the curriculum of statistics at the undergraduate level from a procedural to a conceptual focus. Not only has this tool been utilized by faculty it is also utilized extensively in statistics education research.

I approached Bob at the 2010 ICOTS conference to see if he might be interested in working with me on a grant proposal to develop assessments that were aligned with the K-12 GAISE framework. His response was a testament to who he is as a person as well as a mentor to all he encounters in the field of statistics education. Not only did Bob agree to serve as a Co-PI on the LOCUS project, he also immediately began helping me network and meet key members in the field of statistics education. Having come through a mathematics education background with advisors who were unfamiliar with the work in statistics education, Bob's guidance, advocacy, and mentorship made a tremendous impact on me as a scholar. His passion for statistics and caring approach to mentorship and collegiality have made an even bigger impact on the field than his work on assessment and teaching at the undergraduate level.

As Co-PI on LOCUS, Bob helped to develop assessments of statistical understanding in grades 6-12. Similar to ARTIST, the LOCUS project aimed to transform the way statistics was assessed in the classroom, textbooks, and on high stakes assessments. We are proud to say the LOCUS assessments have had a direct and immediate impact on the way statistics is assessed at the K-12 level. The assessments and members of our team have met with and been consulted by many creators of high stakes assessments including the SAT. Similarly, the LOCUS assessments have been administered by classroom teachers, university faculty, and researchers all across the world. The LOCUS assessments have been administered to over 70,000 students in all 50 states and in 28 different countries.

Bob delMas has made a lasting and significant impact on the field of statistics education. On a personal level, he has had an incredible impact on me as a faculty member and scholar. More than anything, Bob has been a great friend during times of professional and personal hardship. I am proud to call Bob one of my closest colleagues and friends. It is a sincere honor and privilege to write this letter of support for Bob's nomination packet.

Sincerely,

Tim Jacobbe, Ph.D.

Associate Dean of Academic Affairs, ad interim Professor & Chair, Department of Teaching and Learning Professor, Department of Statistical Science Fellow, American Statistical Association

Jacobba

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The International Collaboration for Research on

STATISTICAL REASONING, THINKING AND LITERACY



Dear Award Panel,

We are pleased to support the nomination of Robert delMas for a George Cobb Lifetime Achievement Award. We have known Bob for 25 years as an international leader, mentor and significant innovator in statistics education research.

Bob is a founding member of the International Collaborative for Research in Statistical Reasoning, Thinking and Literacy (SRTL), which began in 1999. SRTL is an academic community of leading and emerging researchers and educators in statistics education, focused on bringing about change in the field by focusing on the development of students' statistical reasoning at all levels. Bob is one of the most consistent contributors and leaders of this community from its inception. In particular, Bob's deep knowledge of learning theories have resulted in contributions to innovative curriculum, assessment and technologies that have had a significant impact on statistics education at the college level. For example, he was a key member of the team who developed the university CATALST curriculum, which embedded frontier knowledge of statistical modelling, informal statistical inference, and simulations and randomization-based instructional methods. This curriculum has been adopted at multiple universities across the US. It is one of the first of its kind to use students' contextual and personal understanding as a foundation from which to build more formal statistical understanding. Although these ideals have been raised by the field, few have been so successful in translating these ideals into practice.

Another key contribution that Bob has made to the international community is in his mentorship and enculturation of young researchers into the field. He is well-known for his kind, caring guidance and willingness to support the development of young scholars and the community. His work is often "behind the scenes", where he is a prolific reviewer, co-author, and consistent member and leader of community activities and initiatives. For example, Bob was one of the section leaders of the recent *International Handbook of Research in Statistics Education* (Springer, 2018) and has served in multiple editorial roles in statistics education, including lead editor of the *Statistics Education Research Journal* (2009-2014). In these roles, he took great care to both lead and mentor other researchers and educators, including those from developing countries, to grow a young and diverse group of emerging scholars.

All in all, Bob has a long history of significant and comprehensive contributions to statistics education. His work is far-reaching in many dimensions of the field. He is indeed an obvious candidate for this award.

Sincerely,

Dani Ben-Zvi & Katie Makar

Co-Chairs

The International Collaboration for Research in Statistical Reasoning, Thinking and Literacy

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הפקולטה למדעי הרווחה והבריאות Equity of Social Welfare & Health Sciences הפקולטה למדעי הרווחה והבריאות החוג לשירותי אנוש בשה וلموارد البشرية



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March 3, 2021

To: George Cobb Lifetime Achievement Award in Statistics Education Review Committee

Re: **Bob delMas - nomination**

Dear colleagues:

It is my pleasure to write this letter of support in nominating Bob for the George Cobb Award. I have known Bob in various professional capacities for over 20 years, ever since we spent a week together in 1999 at the first forum of SRTL in Israel. Afterwards, I have followed up his work and read many of his publications, had various chats at conferences, worked with him during a 2-week stay at the U of Minnesota in 2008, etc.

During these years, I witnessed Bob's many contributions to statistics education in the USA and abroad, including to research-based knowledge focused on understanding and teaching core constructs in statistics, educating many grad students, promoting the ARTIST assessment collection, and serving in professional roles to ASA and at conferences. (And not to forget what a masterful teacher and presenter he is - I sat on several of his classes and talks). Very few in the statistics education community have had such an enduring presence.

Let me focus on Bob's contribution to statistics education worldwide, in his service to IASE, the Int'l Association for Statistical Education. In 2010-2013, after gaining much experience as JSE's Associate Editor, Bob volunteered for four long years as Editor of the Statistics Education Research Journal (SERJ), IASE's flagship peer-reviewed publication. (He started this role soon after I finished my 4-year stint as SERJ editor in 2008). At first, Bob consulted me on several occasions regarding both conceptual and technical matters, as he shaped his editorial strategy, but soon took off and I just watched in great satisfaction how he navigated SERJ to new heights. This was during a time SERJ had to cope with a steady increase in submissions, and Bob aspired to nurture young international researchers, while keeping and increasing the quality of published research.

For the reasons described above, I warmly recommend that Bob delMas is awarded the prestigious George Cobb Lifetime Achievement Award in Statistics Education.

Yours sincerely,

Ido Oal

Prof. (Retired) Iddo Gal

Past-President. International Association for Statistical Education. IASE

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March 5, 2021

To: Committee for the CAUSE Lifetime Achievement Award

I write today to encourage the committee to highly consider Dr. Bob delMas as a well-deserving candidate for the Lifetime Achievement Award for CAUSE. Bob's entire career has focused on statistics education and his work has made significant contributions to instructional materials, assessments, and research in undergraduate statistics contexts. He has served on the CAUSE research advisory committee and was instrumental in the success of several research projects from the work with research faculty clusters and the writing of several committee-sponsored reports. Bob was named an ASA fellow in 2010 and is a regular contributor to sessions at the Joint Statistics Meeting, International Conference on Teaching Statistics, and US Conference on Teaching Statistics.

Dr. delMas' research contributions include several assessment instruments that have helped move the field forward (e.g., CAOS, LOCUS, Statistics Teaching Inventory) and the ARTIST website and database that have been used by countless numbers of undergraduate statistics instructors and researchers. He has been part of teams that have pioneered new approaches to statistics instruction through the use of applets (remember his applet and research on students' conception of standard deviation many moons ago?) and instructional materials such as those developed in the CATALST program. The simulation approach used in the CATALST curriculum for introductory statistics used research on students' learning of model-building and making sense of simulated results from random phenomena. The team re-purposed a tool designed for early learning in statistics and probability modeling (TinkerPlots) and positioned it as a viable and valuable learning tool for collegiate-level statistics learning. Bob and his collaborators at University of Minnesota set a strong example of how to build research-informed curricula, using research-based technology tools for learning, and in conducting first class research on students' learning with the curriculum.

Bob's leadership in research in statistics education has also been evident in his long publication list, involvement in the Statistical Reasoning Thinking and Literacy research group, and his mentoring of PhD students who go on to make strong contributions to the disciplines of statistics education, mathematics education, and educational psychology. I have had the distinct pleasure of interacting with Bob on several committees throughout my career, but have never had the pleasure of directly collaborating with him on research and instructional development projects. However, every course I teach on statistics teaching and learning, instructional materials I develop, grant proposals I have written, and research papers I have written have strong ties and influences to the pioneering research and innovative ideas contributed by Dr. Robert delMas. Thus, many generations of my students have indirectly learned from Bob!

Many Smiles

Hage She

Hollylynne S. Lee, Professor of Mathematics and Statistics Education

Senior Faculty Fellow at the Friday Institute for Educational Innovation

Director, Hub for Innovation and Research in Statistics Education



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NICHOLAS J. HORTON

Beitzel Professor of Technology and Society (Statistics and Data Science) Phone: 413-542-5655 E-mail: nhorton@amherst.edu

March 1, 2022

Dear Lifetime Achievement Award Selection Committee,

I am writing to enthusiastically support Robert delMas's nomination for the CAUSE Lifetime Achievement Award. Throughout his career Bob has tirelessly and effectively worked to improve statistics education and to ensure that statistics education research is on a sound scientific footing. He has been an exceptional mentor, a dedicated reviewer and editor (*Statistics Education Research Journal*, 2009-2014), chair of the ASA Committee on Statistics in Two Year Colleges, and past chair of the ASA Section on Statistics Education (now Section on Statistics and Data Science Education).

Along with others in the community, I have directly benefited from the outcomes and deliverables of his many funded grants and related projects. His work on the LOCUS project has improved the assessment of high school statistics courses through the development of a large set of validated items. His work on the eATLAS project led to the development and dissemination of the Statistics Teaching Inventory (STI) is an instrument designed to assess the instructional practices and beliefs of instructors of introductory statistics courses. Bob's involvement with the CATALST project helped to promulgate an innovative introductory curriculum and to develop a cohort of faculty able to teach it. The STEPS and AIMS projects contributed substantially to understanding instructor characteristics and approaches to adapt materials, respectively.

One project, however, stands out in terms of impact that continues to resonate broadly in the community. Bob was co-PI (with Joan Garfield and Beth Chance) on the Web-based ARTIST (Assessment Research Tools for Improving Statistical Thinking, https://apps3.cehd.umn.edu/artist) project. As part of this project, a set of validated instruments and assessments were developed and made accessible through the above website, including the Comprehensive Assessment of Statistics [CAOS] pre-test, post-test, and eleven topic assessments (e.g., Bivariate comparisons and study design). These items were particularly valuable as they provided many examples of problems that focused on statistical thinking more than statistical computation. More than 15 years after the grant ended, these online assessments continue to be used by the community (myself included, as recently as January, 2021) as a way to provide low-stakes assessments and practice on conceptual understanding for our students.

Bob's work on these projects, in addition to the dozens of workshops, presentations, and papers that he has presented or written, have had a broad impact on the teaching and learning of college-level statistics. I can't imagine a more worthy recipient of the CAUSE Lifetime Achievement Award.

Sincerely yours,

Dr. Nicholas Horton

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March 2, 2021

To the members of the George Cobb Lifetime Achievement Award Committee:

I'm enthusiastically supporting the nomination of Bob DelMas for the George Cobb Lifetime Achievement Award. Bob has been at the center of some of the most important and innovative research in Statistics Education during my career. In addition, he's a fantastic human being who embodies the USCOTS ethos that merges statistics education with laughter and music.

Bob has been a leader behind several important projects in statistics education: The ARTIST project, LOCUS, and CATALST. Bob's greatest contribution to Statistics Education is his fundamental work in developing validated assessment instruments for measuring statistical conceptual understanding. Both ARTIST and LOCUS, and to some extent CATALST, are deeply concerned with studying student understanding in a scientific and rigorous manner. The ARTIST project created an extensive catalog of high-quality assessment items, thoughtfully served up in a manner that made them easy to use in the classroom. As I recall, the items were normed, and, personally speaking, played a valuable role in helping me assess my own students.

CATALST and STURR (an NSF-funded project Bob led) developed carefully scaffolded lessons to develop statistical thinking using randomization-based tests and simulations. These projects implemented George Cobb's vision from that first USCOTS (2005) and demonstrate that carefully designed lessons using real data and integrated assessments can indeed help students achieve a deeper understanding of statistical inference. The CATALST borrowed heavily from Model Eliciting Activities, a form of lesson originally developed in math education and later widely used in engineering education. Bob's project was the first to apply this approach to statistics education, and I found it to be powerful enough that we integrated it into the Mobilize Intro to Data Science for High School course that I was involved in developing.

Although the CATALST curriculum isn't as widely used at universities as, say, the randomization approach espoused by Tintle et. al or the Lock family, it is widely used by researchers in statistics education, where it is valued by the insight it provides into students' thought processes. I have found that there are, roughly speaking, two types of statistics educators. For the most part, statisticians concern themselves with developing curriculum (and I count myself in that group), while the education researchers are concerned with pedagogical approaches to deepen learning, and I count Bob in this latter group. Bob's projects are deeply grounded in the science of learning and teaching. CATALST is a great example of a project that merges pedagogy with a content, and to a great extent could only come from educational researchers like Bob who have a deep understanding of both Statistics and education.

My two closing arguments for why Bob deserves this award are that, as the first year in which the award has been dedicated to George Cobb, Bob's projects have directly advanced George's vision of a randomization and simulation-based approach to learning statistics. Second, USCOTS is set apart from every other organization I belong to and, I suspect, every other academic organization, by its commitment to music and laughter. Some of my fondest memories of USCOTS are of Bob ballroom dancing and leading a group in song in celebration of Statistics.

Sincerely,

Robert Gould, Ph.D.

Undergraduate Vice-Chair, Dept. of Statistics Lifetime Achievement Award Winner 2019

Fellow, American Statistical Association