

Dr. Allan Rossman's excellence in teaching is exemplified by his student-centered approach and innovation. His efforts have had a major impact at Cal Poly and in the MAA community at large through his curricular materials, leadership, and workshop presentations.

Allan began his career in the Department of Mathematics and Computer Science at Dickinson College in Pennsylvania. While there he authored the *Workshop Statistics: Discovery with Data* text, the first entirely activity-based introductory statistics text. This text was groundbreaking for its focus on real data, student investigation, and integration of technology. Students are expected to think and explain, not merely listen passively to lectures. Many students also cite developing an appreciation for the subject that they did not think possible, and a new ability to critically evaluate quantitative information. More recently, he has co-authored *Investigating Statistical Concepts, Applications, and Methods*, aimed at providing more mathematically inclined students with a balanced introduction to the discipline of statistics through active investigation of genuine statistical studies and active exploration of statistical concepts using simulation and applet based visualizations. Students using these materials through a newly created course at Cal Poly have consistently remarked on how much they appreciate seeing the application of the tools while also focusing on the mathematical underpinnings behind the methods.

Through scores of workshops, including directing the MAA's NSF-funded *STATS Workshops* (Statistical Thinking with Active Teaching Strategies), he has reached hundreds of statistics educators, primarily mathematicians, and given them tools for rethinking their own statistics courses. Participants in his workshops have also reacted very favorably and appreciated the plethora of resources provided, allowing them to make immediate changes in their own classrooms, as well as his engaging presentation style. He is world renowned for his active learning pedagogical approach and has served in numerous advisory roles including the advisory board for the recently approved GAISE recommendations for assessment and instruction in statistics education.

His service to the MAA community has also included chairing the MAA/ASA joint committee on Undergraduate Statistics and helping to found the MAA SIGMAA on Statistics Education. Dr. Rossman has been instrumental in helping to foster connections between the mathematics and statistics communities.

While the above comments have focused on his work outside of Cal Poly, his NSF-funded curriculum development efforts, and his influence on statistics teachers in general, he has also had a tremendous impact locally. Specific to Cal Poly, Dr. Rossman has been an active leader in curricular changes in our department. For example, Dr. Rossman helped develop a new orientation course for incoming freshmen statistics majors, providing them with an overview of the statistics discipline, examples of statistical practice, broad understanding of key statistical ideas, while also focusing on developing their oral and written communication skills. His undergraduate double major in Mathematics and English have served him well in providing new statistics majors with skills they will use throughout their undergraduate degree, while also helping the

department to focus on the ability for graduates to communicate their statistical knowledge. He also helped develop the experimental course mentioned above (Stat 301) which has become the basis for our new two course sequence for mathematics and statistics majors. Our department is well known nationally for its unique undergraduate statistics major, a reputation that has grown exponentially since his arrival.

Still, Dr. Rossman's focus is always on the students in his classes. His courses serve as a model in their organization, active-learning approach, use of technology, and focus on conceptual understanding. He provides his students with extensive support material and opportunities for success, while also demanding deep understanding. This approach is exemplified by a heavy usage of "investigation assignments." These assignments ask students to work collaboratively to explore and extend a concept or method used in class. They are often open-ended, call for use of the computer, and ask students to write a report explaining their findings. Dr. Rossman generally grades these assignments himself, providing detailed feedback and assistance aimed at helping the students improve their understanding of the material. Students also specifically appreciate his detailed outlines and handouts, allowing them to focus on the problems and concepts rather than frantic note taking. Never afraid to take a gamble, he is always trying new approaches in his courses and constantly reflecting on his own teaching and student performance. Most students do not realize the amount of time he devotes to these courses, but find a very affable, friendly, approachable instructor. What is clear to students is his love for his job.

Never afraid to take a gamble, Dr. Rossman is always trying new approaches in his courses and constantly reflecting on his own teaching and student performance. Most students do not realize the amount of time he devotes to these courses, but find a very affable, friendly, approachable instructor. What is clear to students is his love for his job. While numerical teaching evaluations are not always easy to interpret, it is noteworthy that Dr. Rossman's ratings are consistently above the department average even for courses taught in our "studio classroom" environment (a computer lab that is a very difficult room to teach in logistically and acoustically). Students comment on his passion for teaching and his contagious love for the subject. They appreciate his interest in them and credit him for helping them think as a statistician. Alums have written to express appreciation for the statistical knowledge he has given them as well as strengthening their writing, communication, and presentation skills.

In summary, Dr. Rossman has been a key instigator in implementing active learning in introductory statistics, leading students to discover statistical ideas and methods of data analysis for themselves. He is an internationally recognized leader in statistics education, and in particular, recent reform efforts in college introductory statistics pedagogy. He has had a tremendous impact on the teaching of statistics through his own teaching, curriculum development projects, and contributions to teacher preparation.