Welcome to the winter issue of *Insight*, a quarterly newsletter celebrating the accomplishments of our community of researchers. We aim to spotlight insights from people at the Dugoni School working in areas including clinical or biomedical research, the scholarship of teaching and learning, improvement of the health care system, and professional partnerships that advance the field.

**RESEARCH IN THE SPOTLIGHT**

**Evaluating outcomes of computer-based classroom testing**

**What is it?**
The dental school switched from paper-based examinations to a computer-based system called ExamSoft. This study examined pre-doctoral dental students’ acceptance of ExamSoft and factors impacting their acceptance, and aimed to explore the impact of ExamSoft on perceived student learning and examination performance.

**What problem does it aim to solve?**
*The study aimed to answer four main questions:*
1. How well is ExamSoft accepted as an assessment and learning tool by predoctoral dental students at the school?
2. To what extent do personal factors such as prior computer-based testing experience and computer skills and perceived ease of use/usefulness impact acceptance?
3. What is students’ perceived impact of ExamSoft on their learning?
4. What is the impact ExamSoft on students’ examination performance?
How does it work?
The study found that ExamSoft was well accepted by the students as an assessment and learning tool. Those who found the software easy to use and useful for learning were more likely to accept the software. Self-reported computer skills were found to be a significant predictor of students’ comfort level of taking classroom examinations on a computer. Students reported that the timely and detailed exam performance reports provided by faculty were helpful for their learning and helped them identify their strength and weakness. They expressed the desire for all faculty to consistently provide detailed exam performance reports. It is unclear from the findings how CBT impacted students' examination performance.

What are the real-world implications?
Computer-based testing offers several unique features that are not available in printed assessment. Faculty are encouraged to provide timely and useful exam performance feedback to students. A significant percentage of students experience anxiety around computer-based exams; this rate could be lowered with training and responsive technical support.

What are the next steps?
Further research on the factors that affect student performance on tests would be useful, since there were no clear findings in this study.

Source

Authors
Meixun Sinko Zheng and Daniel Bender
Arthur A. Dugoni School of Dentistry, University of the Pacific, San Francisco, CA, USA

NOTEWORTHY PUBLICATIONS
Publications from previous three months, as reported by Scopus.


The Impact of Research on the Future of Dental Education

“Scientific inquiry and discovery are the fuel for education, research, technology, and health care in all the health professions: dentistry, medicine, nursing, pharmacy, and allied health sciences. The progression of discoveries from basic or fundamental to clinical research is followed by the progression from clinical to implementation and improved health outcomes and processes. Generally, implementation science is the scientific study of methods to promote the systematic uptake of research findings (e.g., basic, translational, behavioral, socioeconomic, and clinical) as well as other related evidence-based practices into standards of care, thereby improving the quality, effectiveness, and cost benefits of health care services. There is little doubt that science has and will continue to provide the essential fuel for innovations that lead to new and improved technologies for risk assessment, prevention, diagnosis, treatments and therapeutics, and implementation for addressing oral and craniofacial diseases and disorders. The history of the U.S. dental profession gives testimony to the continued need for investments in scientific inquiry that accelerate progress in comprehensive health care for all people.”

Dr. Harold Slavkin  
Professor and Dean Emeritus USC Dental School, and ex-Director NIDCR


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Contact Insight: Have comments or suggestions on this or future issues of Insight? Contact Dr. David Ojcius, Assistant Dean for Research and Chair of the Department of Biomedical Sciences, to share your thoughts or to learn more about how to get involved in research at the Dugoni School. Email: dojcius@pacific.edu