Welcome to the Spring edition of the HETS Online Journal!

The end of an academic year is a time to celebrate the accomplishments of our students, as well as the achievements of our faculty and staff. Of course, as soon as one-year ends, institutions look ahead to the next year… and most of you started preparing for the upcoming year some time ago. While some things continue as usual, our current environment is one of frequent and rapid change… perhaps more so than ever before. Changes driven by technology are especially commonplace, and HETS, with its mission of using technology to facilitate student success, is well-positioned to help institutions navigate this ever-changing environment. Institutions continue to face complex challenges regarding the use of technology in academic endeavors. This issue of the Online Journal addresses several of those current issues in higher education.

The issue begins with an article entitled, "Impact of Co-Curricular Activities during Coding Bootcamps in Two Undergraduate Introductory Programming Courses," where the author shares the results of a research project designed to strengthen students' learning experiences in two introductory programming courses. The project began in April 2024, with two levels of the Coding Bootcamp implemented during the academic year 2024–2025. Eight student mentors were utilized to mentor their peers in the development of technical and professional skills.

The next article, "Beyond the 'How To': A Dual-Framework Model to Drive Strategic LMS Adoption and Empower Student Success," documents the adoption and use of a Learning Management System by mathematics faculty at a community college using the combined perspectives of Everett Rogers's Diffusion of Innovation Theory and Arthur Chickering's Seven Principles of Good Practice. The study examined faculty perceptions, usage patterns, and how

Rogers's five attributes: relative advantage, compatibility, complexity, trialability, and observability, help explain adoption. Chickering's principles were used to highlight the pedagogical motivations, including prompt feedback, student–faculty interaction, and active learning, that make technology instructionally meaningful.

"Ethical Integration of Generative AI in Higher Education" examines the ethical integration of generative AI in online higher education and explores how assessment practices must evolve to remain pedagogically relevant and ethically grounded. Drawing on interdisciplinary scholarship on artificial intelligence, ethics, and higher education, the article analyzes emerging tensions between traditional assessment models and AI-supported learning environments. It examines ethical principles such as transparency, accountability, autonomy, and fairness that should guide the integration of AI technologies in educational contexts.

In "From Labs to Laptops: Understanding Online Science Learners," the author shares how an institution examined the characteristics of online science learners based on two online organic chemistry laboratory courses that incorporated commercially available at-home laboratory kits. The study highlights the key traits observed among successful students, including self-discipline, technological adaptability, curiosity, and engagement with hands-on learning.

"Empowering Students for a Cyber-Safe Future," evaluates the effectiveness of a short-term cybersecurity awareness intervention delivered through a series of virtual workshops. The workshops aimed to improve participants' cybersecurity knowledge, confidence in identifying cyber threats, and increased intention to adopt safer digital practices.

The author of "AI-Augmented Pedagogy in Higher Education: An Ethical and Equitable Framework for the Governance and Operational Integration of AI in Teaching and Learning,"

introduces an AI-Augmented Pedagogy (AAP) framework, developed through a Sequential Explanatory Mixed-Methods Design grounded in a systematic synthesis of 312 peer-reviewed empirical studies, 68 institutional policy documents, and 26 grey literature sources. The framework is theoretically principled and empirically informed; its direct causal claims require prospective validation.

"Uncovering the Impact of Integrating Virtual Labs into General Chemistry Wet-Lab Sequence on Student's Scientific Skills,' evaluates the authors' experience with integrating virtual laboratory simulations into an in-person General Chemistry laboratory course to determine if student learning outcomes are enhanced. Two course sections implemented the same virtual laboratory simulations, while a control group section followed the standard wet-lab sequence without virtual laboratory integration. Student learning outcomes were assessed using quiz-based evaluations and cumulative final exam questions across several core laboratory topics, including percent error calculations, stoichiometry, titration, gas laws, and spectrometry.

Finally, our sole Spanish language article in this edition, "El modelo de enseñanza de aprendizaje basado en el trabajo (WBL) y su impacto en las competencias de empleabilidad de estudiantes egresados del currículo de educación ocupacional y técnica del DEPR," examines the impact of the Work-Based Learning (WBL) teaching model on the employability competencies of graduates from an occupational school over a multi-year period. The study indicated a need for occupational curriculum reform to better align with labor market demands.

As you can see, this issue addresses many of the current hot issues in higher education. We hope that our authors' experiences will help you and your institution to impact student success!