



# 2024 BEST PRACTICES SHOWCASE PROCEEDINGS

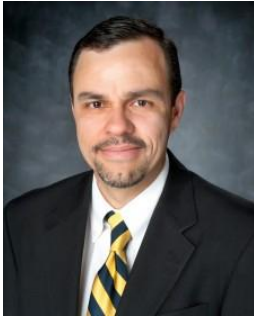
January 11 & 12, 2024  
Inter American University of PR, School of Law  
San Juan, Puerto Rico

## Contents

<b>Message from the Chairman</b> .....	3
<b>Message from the Executive Director</b> .....	4
<b>About the 2024 Best Practices Showcase</b> .....	4
<b>ACCESS TRACK</b> .....	6
Integration of Undergraduate, Graduate Students, and Undergraduate Programs’ Faculty Members in a Mentored Research Experience: Enhancing Diversity and Retention .....	7
Enhancing Learning Outcomes: Exploring Hybrid Learning Strategies and Tools.....	8
Internationalizing the Curriculum in a Hispanic-Serving Institution .....	9
Teaching Accessibility: A Best Practice for Increasing Equity, Access, and Quality in Education .....	10
Nurses made in PR: And Adult Modality tailored for Hispanics living and returning to work in the Continental USA.....	11
<b>RETENTION TRACK</b> .....	12
Enhancing Hispanic Student Retention through Innovative Technology Integration in Online Learning .....	13
El rol de un navegador virtual: perspectivas sobre el acceso y la retención de estudiantes en línea.....	14
Digital Badging Program Deployed to Improve Student Engagement and Retention.....	15
Participation For Retention: Best Practices of Online Course on Labor Security and Hygiene .....	16
A Increasing Student Success in Stem: Pedagogical Impact of Mathematics Courses at the University of Sagrado Corazón .....	17
Building Community for Online Doctoral Students via Social Media.....	18
<b>ONLINE LEARNING AND TECHNOLOGY INTEGRATION TRACK</b> .....	19
Transmedia Storytelling to Understand Infectious Diseases .....	20
Elevating Program Development: Integrating Artificial Intelligence to Optimize Online Courses .....	21
El CRESCO: Un Modelo de Servicios En Línea para el Desarrollo de las Competencias de Información, Comunicación Científica y Análisis Estadístico para Estudiantes y Profesores que realizan Investigación Clínica y Traslacional .....	22
Teaching with Technology at CSU San Bernardino .....	23
Potenciando el Éxito Estudiantil: Un Viaje Transformador en la Planificación de Instrucción y Gestión Docente.....	24
Passion Driven Project: Development of an Innovative Capstone Experience to Integrate Biomedical Knowledge and Promote Students’ Wellness Using Design Thinking Principles .....	25
Explorando la Integración de Chatgpt: Innovación en la Educación.....	26
Transición Curricular a la Virtualidad Mediante el <i>Design Thinking</i> .....	27
Surprise Me! An Innovative Educational Strategy Integrating Art and Health Humanities in Health Professions Education .....	28

Edición y traducción potenciadas por IA en diseño instruccional .....	29
Implementing a Learning Management System that Meets your Clients’ Needs .....	30
AI-Empowered Teaching: A Model for GenAI Teaching Integration.....	31
Online Learning: Digital Entrepreneurship from Puerto Rico to the World.....	32
<b>STUDENT   TECHNOLOGY INTEGRATION TRACK.....</b>	<b>33</b>
Viajes Académicos y Programas de Intercambio: Experiencias Bilingües costo efectivas que enriquecen el aprendizaje en Programas de Intercambio .....	34
Inter Robotics: Una asociación de tecnología y competencia .....	35
Leveraging AI to Analyze Narratives around High-Speed Rail.....	36
Modelo de Desarrollo de Ecosistemas de Emprendimiento en Comunidades Escolares.....	37

## Message from the Chairman



On behalf of the Hispanic Educational Technology Services Consortium (HETS), I am delighted to present the 2024 Best Practices Showcase proceedings celebrating technology innovation for Hispanic success in Higher Education. This historic event brings together, for the fourteenth time in HETS' chronicles, an unprecedented number of expert academicians to highlight the most prominent opportunities to enhance Hispanic higher education through the savvy use of technology.

The HETS Consortium is incredibly proud to have gathered over 30 member institutions from Puerto Rico, the United States, and Latin America for this event. We are equally delighted to include a forum of talented students who showcased innovative projects they had been working on within the academia. We also welcomed attendees from other institutions and organizations, fostering a sense of community and shared learning. All presentations at the Best Practices Showcase, including the opening plenary, were recorded, ensuring everyone could benefit from them.



HETS has established itself as a leading organization in integrating technology to advance higher education and learning opportunities for the Hispanic community. The HETS Consortium has elevated collaboration to a new rank, featuring local and national speakers and showcasing more than 40 best practices. These sectors have been represented in the 2024 HETS Best Practices Showcase, underscoring the power of collaboration for the success of Hispanic students and our community.

We invite you to read these proceedings and plan to collaborate in this effort next academic year to benefit from this insightful experience. If you want more information about the Best Practices Showcases, please submit your interest to [info@hets.org](mailto:info@hets.org). We are confident these proceedings will attract more participants to submit their proposals.

Take advantage of the opportunity to be part of this initiative!

Sincerely,

A handwritten signature in black ink, appearing to read "Carlos Morales".

**Dr. Carlos Morales**

HETS Chair

President, Tarrant County College – TCC Connect Campus

## Message from the Executive Director



Greetings everyone!

We are so proud to celebrate our 2024 Best Practices Showcase with our members, collaborators, and peer organizations and institutions as part of over 30 years of HETS history. Thank you for your constant support!

As a pioneer organization in the use of technology in higher education, HETS is delighted to continue serving our academic communities through this initiative that gathers a outstanding group of experts in different academic fields. The Best Practices Showcase is a great opportunity for academic leaders to share their vast knowledge and expertise.

My gratitude to the Executive Committee for supporting the decision to meet in person during these activities, but also in expanding our reach by conducting the Conference Opening Plenary virtually, allowing us to transmit live and record all presentations to make them available through HETS website. Moreover, we opened again a track to forum talented students who showcased innovative projects they had been working within the academia.

As we continue to work together, we will remain carrying out our mission, focusing on the transformation of teaching and learning through technology, and the success of Hispanic students. We hope these proceedings give you a sense of this Conference and provide you with important tools, resources, and lessons to continue enhancing your practice and providing new opportunities for Hispanics in Higher Education. Enjoy!

Best regards,

A handwritten signature in black ink, appearing to read 'Yubelkys Montalvo'.

**Dr. Yubelkys Montalvo**  
HETS Executive Director

## About the 2024 Best Practices Showcase

The Hispanic Educational Technology Services Consortium (HETS) highlighted and celebrated the outstanding work of its member institutions that meaningful and strategically use technology to achieve Hispanic student success during the HETS Best Practices Showcase (BPS) held on January 11 and 12, 2024, at the School of Law of the Inter American University in San Juan, Puerto Rico. The schedule included four major tracks focused on Access, Retention, Online Learning and Technology Integration in Higher Education, and a track for talented students who showcased innovative projects.

## News and video playlist

We invite you to visit the following link: [HETS 2024 BEST PRACTICES SHOWCASE SHARED MORE THAN 40 PRESENTATIONS FROM INSTITUTIONS IN PUERTO RICO AND THE UNITED STATES](#), with the news about the even. Also, a playlist with all videos is available at our YouTube channel, accessible here: [2024 HETS Best Practices Showcase - YouTube](#).

## Conference Proceedings

HETS invited Best Practices Showcase Conferences presenters to submit their abstracts for inclusion in this Proceedings. This allows HETS BPS presenters to share their work. This BPS Conference Proceedings is an Open Access research repository that contains the permanent records of the research generated.

## Showcase Tracks

HETS has defined a “best practice” as an innovative approach or strategy that, with the effective use of technology, has proven to increase recruitment, promote student success, improve student retention and completion, and provide institutions with viable, effective, and efficient approaches for Online Learning and Technology Integration in Higher Education. Certainly, HETS member institutions are experts in dealing with the Hispanic population and finding ways to provide them with opportunities to succeed. During the 2024 Best Practices Showcase, we opened a space to share this expertise on the following tracks:

### Access

This track targets innovative projects that focus on increasing Hispanics’ access to higher Education and Internationalization initiatives. The project is expected to have had success in demonstrating ways to facilitate Hispanics’ understanding and awareness regarding available opportunities to access and succeed in Higher Education.

### Retention

This track is intended to showcase innovative practices that strategically use technology to support, drive, and optimize retention of Hispanic students in online courses and promoting the effective development and implementation of assessment efforts through the innovative and strategic use of technology in Distance Learning. This track considered projects that use technology to track, measure, support, and assess Hispanic student learning success and projects that demonstrate how their approach has had a significant impact on their success, especially in supporting and increasing Hispanic student retention in online courses or programs.

### Online Learning and Technology Integration

This track is intended to showcase innovative practices that strategically use technology to support, drive, and optimize online courses or programs and promote effective development and design through the innovative and strategic use of technology in Distance Learning.

### Student | Technology Integration

For this special occasion of HETS 30<sup>th</sup> Anniversary, a new track was created specifically by students for students to share their innovative projects. This track was intended to showcase those projects that strategically use technology to support, drive, and optimize their academic goals and/or extracurricular initiatives.

## **ACCESS TRACK**

## Integration of Undergraduate, Graduate Students, and Undergraduate Programs' Faculty Members in a Mentored Research Experience: Enhancing Diversity and Retention

### Presenter

Margarita Irizarry Ramírez

Universidad de Puerto Rico, Recinto de Ciencias Médicas, San Juan, PR

[margarita.irizarry@upr.edu](mailto:margarita.irizarry@upr.edu)

### Abstract

Diversity and interdisciplinarity are required for successful and transformational Clinical and Translational Research (CTR). Hispanics are underrepresented in the research environment. The Title V program at the Medical Sciences Campus of the University of Puerto Rico, developed a research pilot project program (PiP) in CTR to integrate health professions' faculty and students, basic scientists, seasoned researchers, and undergraduate programs' faculty members from all postsecondary institutions across Puerto Rico, in CTR teams. More than 99% of the PiP teams members are Hispanic.

The practicum focuses on the organizing of a research team identified as a Pilot Project team (PiP team) and the implementation of the proposed project. At present the PiP project has representation from eight different institutions/ campuses: University of Puerto Rico: Humacao, Cayey, Rio Piedras and Medical Sciences Campus; Instituto Tecnológico de Puerto Rico at Manatí; Universidad Central del Caribe; Universidad Interamericana de PR Recinto Metro and Huertas Junior College. The practicum includes basic aspects of training in research including responsible conduct of research, scientific writing, statistical analysis, and the design of a proposal. These training courses are mostly web based online offerings. Scientific publications and writing, and statistical analysis consultants are also available through web-based platforms. Each team is assigned to its own Microsoft Teams enclave.

The Teams platform serves as repository for data, administrative paperwork, group meetings (live and recorded), ideas exchange and general housekeeping, as the PiP team develops its research. Students and faculty members participating in each team are required to participate in trainings to enhance their research knowledge and productivity, mostly offered online and coordinated by the Center for Research, Entrepreneurship and Scientific Collaborations (CRESCO) of the Title V project. Through the CRESCO, participants have access to platforms such as Intellectus Statistics, Grammarly, Writefull, Turnitin and on-line consultant's services. Dept. of Education #: P031S200104

### Key words:

Online training, Clinical and Translational Research, Diversity, Outreach, Inclusion.



## Enhancing Learning Outcomes: Exploring Hybrid Learning Strategies and Tools

### Presenters

Claudia Vela-Hernández  
The University of Texas Rio Grande Valley  
[claudia.vela02@utrgv.edu](mailto:claudia.vela02@utrgv.edu)

Roberto Rivera  
The University of Teas Rio Grande Rivera  
[roberto.rivera@utrgv.edu](mailto:roberto.rivera@utrgv.edu)

### Abstract

In today's dynamic educational landscape, hybrid learning has emerged as a powerful approach to engage and educate students. Hybrid learning, which combines in-person and online elements, offers a versatile and effective way to meet the diverse needs of students and adapt to the changing educational environment. In addition, online tools can enhance instruction and increase student engagement in the hybrid classroom. To increase student engagement for hybrid learning, the Center for Online Learning and Teaching Technology at the University of Texas Rio Grande Valley, offered trainings on hybrid learning and online tools such as Jamboard, Hypothesis.is, Quizizz, and Blooket.

One of the goals of these training courses was to help instructors identify and evaluate online tools to determine if they could use them in their practice. Instructors using these online technologies report to have increased student participation in the online and face-to-face classroom. This session aimed to examine successful hybrid learning models and practices, explore innovative tools, and promote collaboration and networking among educators, academic leaders, and instructional designers to discuss emerging technologies that enhance the impact of hybrid learning and student success.

### Key words

Hybrid teaching, flipped learning, student engagement, online tools.

## Internationalizing the Curriculum in a Hispanic-Serving Institution

### **Presenter**

Azucena Herrera  
University of Texas Rio Grande Valley (USA)  
azucena.herrera@utrgv.edu

### **Abstract**

The purpose of this study is to introduce a curriculum internationalization practice in a Hispanic Serving Institution (HSI) through the implementation of an innovative strategy for online and hybrid courses, the Collaborative Online International Learning (COIL) model.

This model was applied to design an international virtual classroom by two professors from the Business field, on two remote college campuses, from different countries, located in America and East Europe, including two cohorts of 104 and 65 students. This internationalization of the curriculum practice allowed an interactive space where students, from different customs, languages (English/Serbian), and cultures, were learning and participating in a multicultural and multilingual context.

The common topics studied in the international course section were managing diversity and inclusion, teamwork, and entrepreneurship. This course curriculum offered college students a platform to learn course content through their own and other's unique cultural lenses, build knowledge together, and develop diverse relationships.

The impact of this pedagogical intervention was measured at the end of the course (for both cohorts), including the dimensions of inclusion and diversity, global competence, and multiculturalism.

The most relevant findings were on the high stress of intercultural awareness, intercultural communicative competence, and managing global competencies among the students of both countries.

In addition to the benefits to students, the COIL model offered opportunities to faculty through networking and collaboration. It is a cost-effective pathway to internationalize curricula and a path to develop new partnerships globally.

### **Key words**

Curriculum, Internationalization, COIL, HSI, Global Competence, Multiculturalism.

R. J. Méndez-Fernández

## Teaching Accessibility: A Best Practice for Increasing Equity, Access, and Quality in Education

### Presenter

Rolando J. Méndez-Fernández

Teach Access (Puerto Rico)

[rolando@teachaccess.org](mailto:rolando@teachaccess.org)

### Abstract

What did you learn about accessibility and/or disability when you were in school? We are guessing that the answer is probably “nothing” or “very little.” The discourse in higher education has been mostly around “teaching accessibly”, which involves making sure that course content, technologies, and activities are accessible to students with disabilities. However, very little has been done to make sure that students understand what accessibility is and how it informs their disciplines. A survey in 2017 revealed a [gap in accessibility skills](#). Six years later, that gap still exists.

Accessibility is an essential design component, a legal requirement, and a best practice. So, what can institutions do to make sure their students are equipped to enter the workforce with the skills they need? The conversations must be shifted to “teaching accessibility”, which involves equipping students with [basic knowledge of accessibility](#) so that they are able to develop inclusive practices, policies, and products in their work lives. [Teach Access](#), a US-based nonprofit, supports educators in understanding how accessibility and accessible design intersect with their disciplinary fields, as well as in adopting inclusive and scalable strategies to teach these skills to their students. Teaching accessibility can start with small adjustments, such as adding accessibility as a course topic, including accessibility-focused course goals, or planning learning activities around disability and accessibility, that can be later scaled across the curriculum, so that accessibility is approached as a 21st century skill that is taught to every student.

### Key words

Accessibility, teaching accessibly, teaching accessibility, accessibility skills gap, curricular transformation, DEI, equity, access.

G. Nieves Vázquez, Y. Gonzalez Melendez, C. Rivera

## Nurses made in PR: And Adult Modality tailored for Hispanics living and returning to work in the Continental USA

### Presentadoras

Ing. Gladys T. Nieves Vázquez  
EDP University of PR (Puerto Rico)  
[gnieves@edpuniversity.edu](mailto:gnieves@edpuniversity.edu)

Dra. Yaitzaenid Gonzalez Melendez  
EDP University of PR (Puerto Rico)  
[ygonzalez@edpuniversity.edu](mailto:ygonzalez@edpuniversity.edu)

Christine Rivera  
Lehigh Valley Health Network (Pennsylvania)  
[christine.rivera2@lvhn.org](mailto:christine.rivera2@lvhn.org)

### Resumen

Se presentan dos Instituciones que se encuentran transformando vidas de estudiantes hispanos a través de la educación y oportunidad de empleo en Estados Unidos. El acuerdo entre ambas Instituciones impacta estudiantes universitarios en la Modalidad Semipresencial en EDP University que pueden tener diversas necesidades, que van desde lo académico hasta lo social. Ambas Instituciones, brindan herramientas y recursos a los estudiantes y graduandos, para que puedan transicional al mundo laboral en Estados Unidos. Las necesidades más comunes de estudiantes universitarios adultos incluyen el apoyo económico, buena orientación profesional, acceso al aprendizaje en línea, equilibrar su vida personal y los estudios. De igual manera se promueve el apoyo en su transición a la comunidad. El propósito es un respaldo integral y de confianza, realizando la Educación de Excelencia que contribuya a una comunidad de Hispana de Éxito.

### Palabras claves

Modalidad semipresencial, educación, excelencia, confianza.

## RETENTION TRACK

R. Rodriguez Ramos

## Enhancing Hispanic Student Retention through Innovative Technology Integration in Online Learning

### **Presenter**

Prof. Ruth E Rodriguez Ramos  
[ruthrodz271@gmail.com](mailto:ruthrodz271@gmail.com)

### **Abstract**

This proposal advocates for the enhancement of Hispanic student retention in online learning environments through a comprehensive integration of innovative technologies and teaching strategies. The objectives include implementing cutting-edge retention technologies, enhancing assessment strategies, and leveraging lecture capture tools. The strategy involves technology-centric support systems, advanced analytics, and lecture capture technology implementation. Technology-driven support systems will incorporate AI-enabled tools for student success and personalized portals for better engagement. Advanced analytics will utilize predictive modeling and cognitive computing for early intervention and tailored support. Lecture capture technology aims to provide flexible learning experiences, accessible resources, and enhanced study opportunities for Hispanic students. The expected advantages include improved student engagement, personalized support, and data-driven decision-making. The proposal emphasizes the benefits of personalized support systems, early interventions, and flexible learning approaches for Hispanic students' academic success and institutional effectiveness. Overall, the initiative aims to create a more inclusive and supportive learning environment, leading to increased Hispanic student retention rates and overall institutional success.

### **Key Words**

Hispanic students, Retention, Online learning, Technology integration, AI-enabled tools, Predictive modeling.

## El rol de un navegador virtual: perspectivas sobre el acceso y la retención de estudiantes en línea

### Presentadores

Emanuel Santos De Jesús, M.A.  
Universidad Albizu (Puerto Rico)  
[esantosde@albizu.edu](mailto:esantosde@albizu.edu)

Alice J. Casanova Ocasio, PhD  
Universidad Albizu (Puerto Rico)  
[acasanova@albizu.edu](mailto:acasanova@albizu.edu)

### Resumen

La retención estudiantil es un desafío importante en la educación superior, especialmente en los programas en línea. Los estudiantes en línea enfrentan barreras como la falta de interacción personal, la autonomía en el aprendizaje y la desconexión con la comunidad académica, lo que puede llevar a tasas de retención más bajas en comparación con la educación presencial. Factores como la falta de apoyo personalizado, la falta de motivación y la sensación de aislamiento contribuyen a la baja retención. Consciente de esta realidad, la Universidad Albizu en Puerto Rico creó el rol del Navegador Virtual (NV), apoyado por fondos externos de FIPSE, siendo la única institución en Puerto Rico y una de cuatro en toda la nación en obtener este fondo en 2023. El proyecto Piloto para el Aprendizaje Digital y Modernización de la Infraestructura Tecnológica de Albizu promueve el aprendizaje en cualquier momento y lugar, garantizando una mayor equidad y accesibilidad para sus estudiantes.

El rol del NV se erige como un faro de apoyo y orientación para los estudiantes en línea, con el objetivo de forjar un camino hacia el éxito eliminando barreras a través de un servicio culturalmente sensible. El NV ofrece orientación y guía constante, apoyo técnico y académico integrado, empoderamiento tecnológico, detección y eliminación de barreras, y conexión con recursos económicos y administrativos. Como punto de contacto principal, el NV responde a las necesidades académicas y no académicas de los estudiantes en línea con prontitud y comprensión, facilitando el acceso a servicios relacionados con la matrícula, apoyo académico y otros servicios complementarios, con el objetivo de proporcionar un apoyo integral para el éxito estudiantil.

### Palabras claves

Retención, DEI, aprendizaje digital.

## Digital Badging Program Deployed to Improve Student Engagement and Retention

### **Presenter**

Kristina Harb  
New Jersey City University  
[kharb@njcu.edu](mailto:kharb@njcu.edu)

### **Abstract**

New Jersey City University (NJCU) is an urban, public, Hispanic-serving and minority institution in Jersey City, New Jersey that enrolls about 5,500 undergraduate students, of which about 1,200 are STEM students and 43% Hispanic. NJCU developed the OnPACE Mentoring Program, a component of the federal Title V DHSI grant entitled, "On PACE for STEM Success: Personal, Academic & Career Enhancement at an Urban Public HSI." The OnPACE for STEM Success grant expands educational opportunities for Hispanic and low-income STEM students and improve their academic and postgraduate outcomes.

The OnPACE Mentoring program is a year-long program with frequent interaction among members of mentee cohorts. The OnPACE Mentoring program model provides students with faculty-based coaching and "soft skills" development, including role modeling, career exploration, financial and financial aid literacy, study skills, and events led by practicing professionals. To improve student participation within the OnPACE Mentoring Program a digital badging program was implemented. The digital badging program was a cost-effective and innovative practice to improve student engagement and retention. Partnering with the Center for Leadership and Engagement we were able to utilize their digital badging platform subscription at no additional cost. Students were able to earn digital badges which showcased their skills and knowledge in research, career and/or academic preparedness making them marketable to future employers. Thirty-seven students and counting have already earned digital badges through this opportunity.

### **Key words:**

Digital badging, student engagement, Hispanic-serving, mentoring.



## Participation For Retention: Best Practices of Online Course on Labor Security and Hygiene

### **Presenter**

Luz Leyda Vega-Rosado  
Inter American University of Puerto Rico  
San German Campus  
[luz\\_vega@intersg.edu](mailto:luz_vega@intersg.edu)

### **Abstract**

This proposal is to share practices of a 100% online course that prove to increase the engagement and retention of Hispanic students. The course is Labor Security and Hygiene, a requirement for the students in the undergraduate program of human resources management at the Inter American University of Puerto Rico. During the semester of August to December 2020, the students had to revise the Centers for Disease Control and Prevention (CDC) and see what they were recommending to employers in terms of COVID-19 and their prevention. Other activity was a project identifying one enterprise in a specific industry and looking on the homepages of the Occupational Safety and Health Administration (OSHA), the CDC, and others regulatory agencies that have developed recommendations for that industry on how to protect employees. The students also participate in online seminars provided by the Office of Puerto Rico OSHA.

During the semester of August to December 2021, the activities that most increased students' motivation were the assignments that include interactive work. Those activities, among others, were the live calculation of cost of accidents and insurance with the professor using the whiteboard of the Blackboard platform, and a synchronous conference about new 2021 Emergency Temporary Standards related to COVID-19. In the semester of August to December 2022, an interactive module prepared using Rise 360 was included to present the historical development of the laws and regulations related to security and hygiene in the workplace. This was an innovative way to present a topic that was typically boring for students. In the assignment associated with this topic, 95% of the students passed with a grade higher than 80%. The retention rates were for August - December 2020: 100%; for August - December 2021: 90%; and for August - December 2022: 96%.

### **Key Words**

Labor, Security, Hygiene, COVID-19, OSHA.

A. Cordero. I. Ballester Panelli

## A Increasing Student Success in Stem: Pedagogical Impact of Mathematics Courses at the University of Sagrado Corazón

### Presenters

Agda Cordero  
Universidad del Sagrado Corazón (Puerto Rico)  
[agda.cordero@sagrado.edu](mailto:agda.cordero@sagrado.edu)

Iliana Ballester Panelli  
Universidad del Sagrado Corazón (Puerto Rico)  
[iliana.ballester@sagrado.edu](mailto:iliana.ballester@sagrado.edu)

### Abstract

The "Increasing Student Success in STEM" project, funded by the National Science Foundation and directed by Universidad del Sagrado Corazón since October 2019, addresses critical challenges Hispanic students face in STEM fields. Our goal is to bolster the retention and graduation rates of students pursuing STEM majors, while also facilitating their transition into STEM careers or graduate programs post-internship or research experiences. Particularly, we target the barriers posed by gateway math courses, worsened by recent adversities such as Hurricane María, earthquakes, and the pandemic, which have highlighted deficiencies in math proficiency and student study skills.

Recognizing the imperative to integrate STEM concepts effectively into math education, we have undertaken a systematic redesign of math courses, employing innovative pedagogical strategies such as inquiry-based learning, problem-based learning, and mathematical modeling. Collaborative efforts involving 14 workshops, conducted via Zoom amidst the pandemic, have equipped math faculty with modern teaching methodologies, drawing expertise from local and mainland universities. Through collective decision-making, faculty have determined the incorporation of active learning activities and technology-enhanced teaching methods into course redesigns, tailored to address the diverse needs of Sagrado's student body.

Incorporating active learning strategies, such as teamwork, flipped classrooms, gamification, and simulations, alongside mathematical modeling, has yielded promising outcomes. While some faculty reported no significant differences in student outcomes or attitudes, others observed improved grades and heightened engagement. These findings are corroborated by focus group discussions with students and faculty, as well as comparative analyses of pre- and post-redesign grade distributions and retention rates. The redesign of math courses has not only yielded tangible improvements in academic performance but has also fostered a culture of collaboration among faculty. By embracing technology and working in teams, educators have enhanced the effectiveness of course redesigns, thereby fostering a supportive learning environment conducive to STEM student success.

### Key Words

Course redesign, retention, active learning, mathematics.

## Building Community for Online Doctoral Students via Social Media

### **Presenter**

Amanda Taylor  
California State University, San Bernardino (United States)  
[ajtaylor@csusb.edu](mailto:ajtaylor@csusb.edu)

### **Abstract**

Online students benefit from a strong online community outside of their classes. Social media groups on Slack, Discord, and Facebook can contribute to community building. This project uses an (auto)ethnographic lens to examine student community-building via social media with specific emphasis on an online doctoral program at Boise State University.

The doctoral program is 100% asynchronous online; students are never required to go to campus. Students enter the program in a quasi-cohort, taking the first two required classes together. After the first semester, progression through the program depends on each student's individual path through the remaining requirements.

At the outset of the program, students were encouraged to build a community space outside of the Canvas course sites. I created a Slack workspace for my cohort within the first three weeks of the program. The Slack space is active daily and serves as a place of social connection and academic and programmatic help. Active members of the Slack workspace report high rates of satisfaction with the space and consider it a valuable resource.

### **Key words**

Community, doctoral students, online doctorate, social media, online learning, Slack.

# ONLINE LEARNING AND TECHNOLOGY INTEGRATION TRACK

## Transmedia Storytelling to Understand Infectious Diseases

### Presenters

José Quidgley Nevarez  
Universidad Central del Caribe (Puerto Rico)  
[jose.quidgley@uccaribe.edu](mailto:jose.quidgley@uccaribe.edu)

Francisco Dávila Toro  
Universidad Central del Caribe (Puerto Rico)  
[francisco.davila@uccaribe.edu](mailto:francisco.davila@uccaribe.edu)

Martha Eugenia García Osorio  
Universidad Central del Caribe (Puerto Rico)  
[martha.garcia@uccaribe.edu](mailto:martha.garcia@uccaribe.edu)

### Abstract

This curriculum integration project focuses on infectious diseases, offering health professions students a transmedia storytelling platform. Designed as a capstone experience for microbiology and immunology courses, the initiative aims to enhance students' understanding of infectious diseases and strengthen clinical reasoning skills. Over eight years, students have created patient-centered narratives across diverse digital platforms, leveraging contemporary technologies. The project emphasizes constructing narratives depicting the complexities of infectious diseases, covering transmission, pathogenesis, and public health implications. Students explore current and relevant scenarios to apply their knowledge to real-world situations.

Peer feedback and collaboration are integral components, fostering a supportive learning environment. The transmedia approach enables students to utilize various media forms, enriching storytelling depth. Integrating infectious disease education into the curriculum prepares students for real-world challenges. Technology plays a crucial role, allowing students to create compelling narratives across diverse digital platforms. This technology integration not only supports narrative creation but also provides students with valuable skills in using digital tools, essential in modern healthcare and research environments. Inclusivity enhancements, such as incorporating diverse perspectives and addressing healthcare disparities, contribute to a more comprehensive learning environment. Community engagement and partnerships further enrich the project's impact, fostering connections between the institution and the broader community.

Through evidence of success, including the submission of over 300 innovative proposals, this project serves as a model for effective curriculum design. Leveraging technology, storytelling, and collaborative learning, it prepares future healthcare professionals for the challenges of infectious diseases. Replicating this best practice can positively impact medical education across diverse institutions.

### Key Words

Transmedia storytelling, Infectious diseases, Curriculum integration, Medical education, Clinical reasoning skills, Digital platforms.

## Elevating Program Development: Integrating Artificial Intelligence to Optimize Online Courses

### Presenters

Jessica M. Muñoz Carrero  
NUC University (Puerto Rico)  
[jmunoz1@nuc.edu](mailto:jmunoz1@nuc.edu)

Zoely Santiago Rodríguez  
NUC University (Puerto Rico)  
[zsantiago1@nuc.edu](mailto:zsantiago1@nuc.edu)

### Abstract

ChatGPT, an artificial intelligence tool, has rapidly transformed the landscape of higher education. In response to this transformation, the staff of NUC University's Virtual Library has conducted extensive research on the implementation of generative artificial intelligence in higher education, drawing upon publications from relevant academic institutions and associations. From the perspective of instructional design and course development, the presentation displays case studies that evaluate strategies for integrating AI tools into the creation of educational products. Additionally, it outlines the roles of instructional designers and subject matter experts in utilizing generative AI tools, emphasizing the importance of information validity and the challenges associated with their use. We propose a model for implementing generative AI tools, comprising a clear definition of the problem or task to be addressed and the selection of an AI tool that best suits the specific task and type of desired content.

It is also important to understand prompt engineering patterns to provide detailed instructions to the AI tool, ensuring it grasps the task requirements accurately. It is highly recommended to evaluate the generated content for accuracy, relevance, and overall quality, and modify the generated content as needed to align with the desired format, style, and any additional requirements. Seeking expert or user feedback is crucial to ensure the content meets quality and effectiveness standards. Educational institutions should establish policies and procedures to ensure the appropriate use of AI tools and adherence to academic standards for AI-generated content. Generative AI tools have the potential to revolutionize higher education by enhancing teaching, learning, and research. However, their effective implementation requires careful consideration of ethical implications, pedagogical practices, and institutional policies. By embracing these considerations, educational institutions can harness the power of AI to transform the learning experience and prepare students for the future.

### Key Words

ChatGPT, artificial intelligence, generative AI, library, policies, instructional design, subject matter experts, course development, higher education.

E. Flores-Rivera, J. R. Ubieta-Santiago, E. Santiago-Rodríguez

## El CRESCO: Un Modelo de Servicios En Línea para el Desarrollo de las Competencias de Información, Comunicación Científica y Análisis Estadístico para Estudiantes y Profesores que realizan Investigación Clínica y Traslacional

### Presentadores

Efraín Flores-Rivera

Universidad de Puerto Rico, Recinto de Ciencias Médicas

[efrain.flores@upr.edu](mailto:efrain.flores@upr.edu)

José R. Ubieta-Santiago

Universidad de Puerto Rico, Recinto de Ciencias Médicas

[jose.ubieta@upr.edu](mailto:jose.ubieta@upr.edu)

Elvis Santiago-Rodríguez

Universidad de Puerto Rico, Recinto de Ciencias Médicas

[elvis.santiago@upr.edu](mailto:elvis.santiago@upr.edu)

### Resumen

Nuestro objetivo es describir la planificación, implementación y evaluación del Centro para Investigación, Empresarismo y Colaboraciones Científicas (CRESCO, por sus siglas en inglés), un modelo integrado de servicios en línea para el desarrollo de competencias de investigación. El mismo ha sido desarrollado desde el 2020 en la Biblioteca del Recinto de Ciencias Médicas de la Universidad de Puerto Rico (RCM-UPR) como parte del Proyecto Título V RCM para proveer experiencias en Investigación Clínica Traslacional (ICT) a profesores y estudiantes de programas subgraduados de todo Puerto Rico. El CRESCO ofrece a los participantes acceso a bases de datos y libros electrónicos, plataformas para la redacción y preparación de citas y referencias, prevención del plagio y análisis estadístico. Además, se ofrecen talleres y tutorías en línea para el uso de las bases de datos y plataformas disponibles. Se recopilan y analizan estadísticas del uso y la satisfacción de los participantes. Hasta diciembre de 2023, los logros más significativos del CRESCO son los siguientes: 5,789 usuarios han consultado la base de datos EMBASE; 698 usuarios han accedido a alguno de los e-books sobre investigación disponibles; 243 participantes han accedido a licencias del programa de análisis estadístico *Intellectus Statistics*; 6,292 participantes han visitado el portal para recibir mentoría en estadísticas o el uso de las plataformas en línea disponibles; 479 estudiantes o profesores han participado en los talleres en línea ofrecidos sobre estadísticas, bases de datos y plataformas; 79 profesores o estudiantes han recibido servicios de edición científica y consultoría estadística para completar proyectos de investigación. Al encuestar a los participantes (n=327), el 65% expresó estar satisfecho o muy satisfecho con lo aprendido en los talleres en línea. En conclusión, el CRESCO constituye un modelo efectivo de servicios y recursos en línea para apoyar el desarrollo de destrezas de competencias en ICT.

### Palabras claves

Ambientes virtuales para el aprendizaje, investigación clínica y translacional, servicios de apoyo a la investigación, CRESCO.

## Teaching with Technology at CSU San Bernardino

### Presenters

Amanda Taylor  
California State University, San Bernardino (United States)  
[ajtaylor@csusb.edu](mailto:ajtaylor@csusb.edu)

Dr. Mauricio Cadavid  
California State University, San Bernardino (United States)  
[mcadavid@csusb.edu](mailto:mcadavid@csusb.edu)

### Abstract

This presentation showcased the design and implementation of the *Teaching with Technology* hands-on professional development Canvas course at CSU San Bernardino. The course was designed to introduce faculty to advanced features in Canvas as well as available learning apps that integrate with Canvas. The underlying premise of the course was that the more comfortable faculty are with the technical aspects and teaching applications of these tools, the more likely they are to use them and use them well. Amanda (Mandy) Taylor proposed the original concept for the course, which was collaboratively designed and moderated by the CSUSB Instructional Design team.

Participants had to complete two required modules, one on frameworks for integrating technology and another on accessibility. Then, participants had to choose 6 (of 11) other modules to complete. All modules included knowledge checks and/or demonstration-related assignments. Participants who successfully completed the course earned \$500 in professional development funds, the only costs associated with the project. Funding was provided by the CSUSB Faculty Center for Excellence, part of Academic Affairs. Exit survey data show that participants found the course useful overall. Participants also provided useful feedback to implement before the next iteration in Spring 2024. Helping faculty more effectively incorporate technology into their courses has a direct impact on Hispanic students.

### Key words

Canvas, faculty development, technology, teaching, instruction, professional development.



## Potenciando el Éxito Estudiantil: Un Viaje Transformador en la Planificación de Instrucción y Gestión Docente

### Presentadores

Alice J. Casanova Ocasio, PhD  
Universidad Albizu (Puerto Rico)  
[acasanova@albizu.edu](mailto:acasanova@albizu.edu)

Héctor Suero Álamo, M.A.  
Universidad Albizu (Puerto Rico)  
[hsuero@albizu.edu](mailto:hsuero@albizu.edu)

### Resumen

Este proyecto presenta estrategias innovadoras en la planificación de instrucción y la gestión docente, destacando por su impacto positivo, su enfoque hispano y la eficiencia en costos. Las estrategias implementadas incluyen:

- Personalización del Aprendizaje: Técnicas de diseño de instrucción adaptadas a diversos estilos de aprendizaje, aumentando la participación y el rendimiento académico.
- Gobernanza: Permitiendo esquematizar y organizar prácticas innovadoras basadas en metodologías pertinentes para la calidad del aprendizaje.
- Gestión Docente Dinámica: Integrando prácticas que transformaron el aula virtual en un entorno colaborativo y estimulante, mejorando la retención estudiantil.
- Integración de Tecnología: Utilizando tecnologías educativas avanzadas para mejorar la experiencia de aprendizaje, demostrando mayor eficiencia y participación estudiantil.

El proyecto contribuye a procesos de toma de decisiones y mejora continua, proporcionando valiosos datos para el análisis institucional y optimización de la calidad educativa. Se recopila retroalimentación regular de docentes y estudiantes para ajustar las estrategias y garantizar la eficacia continua. Además, se diseñaron estrategias considerando las particularidades culturales y lingüísticas de la comunidad hispana, garantizando un ambiente inclusivo y accesible. Los resultados demuestran un aumento significativo en el rendimiento y la participación de estudiantes hispanos. Entre las lecciones aprendidas, se destaca la importancia de la flexibilidad en la planificación, la colaboración entre docentes y abordar las barreras culturales para garantizar la equidad. La iniciativa ha demostrado ser altamente rentable al centrarse en estrategias de alto impacto y tecnologías accesibles, generando beneficios sostenibles a largo plazo en el éxito estudiantil.

### Palabras claves

Aprendizaje personalizado, gestión docente, diseño instruccional, DEI.

M. E. García Osorio, F. Dávila Toro, J. Quidgley Nevarez

## Passion Driven Project: Development of an Innovative Capstone Experience to Integrate Biomedical Knowledge and Promote Students' Wellness Using Design Thinking Principles

### Presenters

Martha Eugenia García Osorio  
Universidad Central del Caribe (Puerto Rico)  
[martha.garcia@uccaribe.edu](mailto:martha.garcia@uccaribe.edu)

Francisco Dávila Toro  
[francisco.davila@uccaribe.edu](mailto:francisco.davila@uccaribe.edu)

José Quidgley Nevarez  
[jose.quidgley@uccaribe.edu](mailto:jose.quidgley@uccaribe.edu)

### Abstract

This capstone project applies design thinking principles to devise a prototype program aimed at fostering behavior change and wellness within second-year students of a chiropractic program. Through the lens of passion-driven learning, students select topics they are passionate about, crafting proposals focused on wellness and health promotion, integrating biomedical science concepts. A comprehensive 360-degree assessment evaluates project outcomes, aligned with key program competencies including application of knowledge, communication skills, critical thinking, problem solving, and teamwork. Evaluation results indicate high levels of accomplishment in all assessed competencies, with students expressing high satisfaction rates. Faculty observations highlight the acquisition of lifelong learning skills, collaborative teamwork, and higher-order thinking. Notably, 10 of 17 innovative projects have been submitted for inclusion in the university wellness program, showcasing the practical impact of this approach. This methodology, tailored to Hispanic institutions, demonstrates potential applicability across diverse health professions, emphasizing lifelong learning, teamwork, and higher-order skills development.

The project integrates various technologies to enhance learning experiences and facilitate the creation of innovative wellness projects. Technologies utilized include Learning Management Systems (LMS), gamification, cloud computing, video conferencing/webinars, mobile apps for health tracking, music generators, digital art tools, virtual reality (VR), and AI for personalized wellness plans. The multifaceted approach aims to engage students through creativity, data analysis, collaboration, and real-world application, preparing them for a technologically advanced healthcare landscape. Implementation of the Passion-Driven Project within a Hispanic institution has yielded significant outcomes, including enhanced student engagement, cultural relevance, and innovation. The project's emphasis on student-centered learning, cultural sensitivity, and holistic health promotion contributes to the institution's broader goals of promoting diversity, equity, and inclusive excellence in healthcare education. By fostering empathy, compassion, and preparedness for diverse healthcare landscapes, this project exemplifies best practices in healthcare education and holds potential for replication and expansion across various educational contexts.

### Palabras claves

Capstone project, Design thinking, Passion-driven learning, 360-degree assessment, Wellness.

## Explorando la Integración de Chatgpt: Innovación en la Educación

### Presentadoras

Diana M. López Robledo  
Universidad de Puerto Rico en Ponce (Puerto Rico)  
[diana.lopez2@upr.edu](mailto:diana.lopez2@upr.edu)

Neyla I. Rivera Caño  
Universidad de Puerto Rico en Ponce (Puerto Rico)  
[neyla.rivera1@upr.edu](mailto:neyla.rivera1@upr.edu)

### Resumen

La inteligencia artificial es un campo de la informática que está enfocado en el desarrollo de sistemas y algoritmos que pueden realizar tareas que normalmente requieren la inteligencia humana. Algunas de las tareas que son capaces de realizar incluyen la toma de decisiones, la resolución de problemas, el reconocimiento de patrones y el procesamiento del lenguaje natural, entre otras. Una de las aplicaciones que están en tendencia es estos últimos meses con una base en inteligencia artificial es ChatGPT. Esta herramienta utiliza un modelo de lenguaje basado en inteligencia artificial desarrollado por OpenAI, específicamente en la arquitectura GPT-3.5. ChatGPT se considera un sistema de procesamiento del lenguaje natural que puede generar texto coherente y relevante en respuesta a preguntas y solicitudes de los usuarios. A su vez, es capaz de mantener conversaciones, responder preguntas, ofrecer explicaciones y generar contenido escrito de manera general.

Siendo ChatGPT un ejemplo de cómo la inteligencia artificial se utiliza para la generación de texto de manera efectiva en una variedad de aplicaciones, se integró en el contexto de varias actividades en la Universidad de Puerto Rico en Ponce. La integración de la inteligencia artificial en instituciones de educación superior permite optimizar procesos de planificación, avalúo y el proceso de enseñanza y aprendizaje. Según la experiencia de las presentadoras, se destacan beneficios en el uso de la inteligencia artificial, tales como eficiencia de manejo de tiempo, mejoras en el proceso de toma de decisiones fundamentada en datos y efectividad en el diseño de actividades educativas.

### Palabras claves

Inteligencia artificial, ChatGPT, planificación, enseñanza, educación superior.

## Transición Curricular a la Virtualidad Mediante el *Design Thinking*

Presentadora

Margaret R. Díaz Muñoz

EDP University of Puerto Rico

[margaret@edpuniversity.edu](mailto:margaret@edpuniversity.edu)

### Resumen

Un estudio desde la perspectiva fenomenológica que categoriza los objetivos particulares de; competencias, currículo, educación a distancia, factores académicos, experiencias formativas y la percepción del proceso del *design thinking*. Una vinculación holística fundamentada en la observación (método fenomenológico), en un ciclo de ejecución (*design thinking*) y los pasos cíclicos de análisis (análisis fenomenológico interpretativo). Para de esa forma converger una modalidad de instrucción de impacto global, una formación profesional relativamente joven, un método y un proceso para solucionar problemas de desarrollo y diseño. Como consecuencia se desarrolló un modelo guía de transición curricular de la presencialidad a la virtualidad sin perder el rigor académico y el desarrollo de competencias específicas. Mientras se determinaban los aspectos que fomentarían la utilización del *design thinking* como un recurso de operacionalización de la educación a distancia.

Asimismo, de forma concreta aporta al tema del desarrollo curricular para la modalidad de instrucción. El estudio destaca que las investigaciones sobre la educación a distancia enfatizan en las herramientas, no en las metodologías o el diseño curricular. Haciendo una aportación al desarrollo de un cuerpo de conocimiento en el tema del diseño curricular basado en competencias disciplinares específicamente para el currículo virtual de programas en diseño. Igualmente, Permitiendo realizar una revisión curricular por competencias donde se alineen las etapas de: Procesamiento pedagógico; Elaboración de secuencia de competencias; Análisis del desarrollo de la competencia; Actualización del programa; y Producción de pruebas (Icarte y Labate, 2016). Que puede ser extrapolada a otras disciplinas de las artes, entre otras.

Mientras concientiza sobre la importancia de la creación de currículos para el formato de instrucción virtual. Proveyéndole a los procesos del *design thinking* una definición con términos académico – curriculares. Identificando mejores prácticas para alinear los modelos curriculares con los criterios puntuales de la Agenda de Desarrollo Sostenible 2015-2030 de la UNESCO (Rentería, 2020). Resolviendo un planteamiento de forma innovadora para un proceso de cambio a través del cual las Instituciones de Educación Superior están trabajando la implementación curricular en la creación de las divisiones de educación a distancia. Siendo así, el modelo guía de transición curricular a la distancia a la vez tiene el potencial de convertirse en un modelo curricular basado en competencias para desarrollar currículos íntegros para la virtualidad (Díaz-Muñoz, 2022).

### Palabras claves

Diseño Curricular, *design thinking*, educación a distancia, transición curricular.

F. Dávila Toro, Martha E. García Osorio, J. Quidgley Nevarez

## Surprise Me! An Innovative Educational Strategy Integrating Art and Health Humanities in Health Professions Education

### Presenters

Francisco Dávila Toro  
Universidad Central del Caribe (Puerto Rico)  
[francisco.davila@uccaribe.edu](mailto:francisco.davila@uccaribe.edu)

Martha Eugenia García Osorio  
Universidad Central del Caribe (Puerto Rico)  
[martha.garcia@uccaribe.edu](mailto:martha.garcia@uccaribe.edu)

José Quidgley Nevarez  
Universidad Central del Caribe (Puerto Rico)  
[jose.quidgley@uccaribe.edu](mailto:jose.quidgley@uccaribe.edu)

### Abstract

"Surprise Me!" innovatively merges art and health humanities into the learning journeys of health profession students, aiming to enhance creativity, reflection, and communication skills while deepening their understanding of health and disease. Students are tasked with creating art pieces that narrate stories related to health and disease, utilizing various forms such as painting, sculpture, photography, music, and creative writing to express their perspectives. Following the creation phase, students engage in reflective activities, including journaling and group discussions, to explore the meanings behind their artworks, fostering self-awareness and contextual understanding. Subsequently, the artworks are showcased in public exhibitions, sparking dialogues on health issues and raising community awareness.

After two years of implementation, "Surprise Me!" has successfully enhanced students' creativity, critical thinking, and community engagement. The project's sustainability, cultural sensitivity, and commitment to continuous improvement have contributed to holistic student development and addressed healthcare challenges across diverse communities. The initiative's emphasis on integrating Hispanic perspectives on health and disease has fostered a more culturally sensitive educational environment and contributed to a broader understanding of healthcare issues. By exploring topics relevant to Hispanic health, such as cultural perceptions of illness and disparities in healthcare access, "Surprise Me!" has provided valuable insights into addressing healthcare challenges specific to the Hispanic population. Additionally, incorporating diverse perspectives into student creative processes has enriched the broader discourse on health and inspired peers. Overall, "Surprise Me!" has significantly enhanced the educational experience for health profession students and positively impacted the institution. Relationship with the Hispanic community, promoted cultural sensitivity, and contributed to more inclusive and informed decision-making processes.

### Key Words

Health humanities, art integration, student creativity, reflective activities, active learning, holistic student development.

J. Santiago Cajigas

## Edición y traducción potenciadas por IA en diseño instruccional

### **Presentador**

Jaime Santiago Cajigas  
NUC University (Puerto Rico)  
[jsantiago15@nuc.edu](mailto:jsantiago15@nuc.edu)

### **Resumen**

En nuestra presentación, examinamos la integración de herramientas de inteligencia artificial (IA) en los procesos de edición y traducción como parte del diseño instruccional, destacando mejoras significativas en la eficiencia y adaptabilidad de los recursos humanos ante las tecnologías emergentes. La implementación de herramientas avanzadas de traducción automática y de gestión de proyectos no solo ha fortalecido la colaboración, sino que también ha agilizado notablemente las tareas de traducción, permitiendo un enfoque más detallado en la cohesión entre los materiales educativos y la coherencia terminológica.

Anticipamos que la adopción gradual de estas herramientas, junto a programas de adiestramiento, fortalecerá la confianza en la IA y destacará el papel crucial del talento humano en asegurar la calidad de los contenidos. Esta iniciativa sienta la base para una expansión en el uso de estas herramientas, buscando un equilibrio entre la eficiencia de la IA con la precisión y el juicio humanos, lo que contribuye a la mejora continua de la calidad de nuestros materiales educativos.

### **Palabras claves**

Inteligencia artificial, diseño instruccional, herramientas de edición y traducción, gestión de proyectos, eficiencia en traducción, revisión humana, adaptación tecnológica.

## Implementing a Learning Management System that Meets your Clients' Needs

### **Presenter**

Raymundo Garza

LMS Specialist, Center for Online Learning and Teaching Technology

The University of Texas Rio Grande Valley

[raymundo.garza@utrgv.edu](mailto:raymundo.garza@utrgv.edu)

### **Abstract**

This presentation helps other institutions understand the entire process required to evaluate and implement a new learning management system (LMS) that meets their client's needs.

During this presentation, you will learn about key elements that a learning management system must have:

- Scalable solution (Storage demand)
- Cloud-based solution (Secure hosting)
- Ease of use and adoption
- Accessible platform
- Integrations with other Tools
- Analytics
- Support (Help Desk)
- Mobile

Attendees will also learn some best practices and recommendations to consider during the planning, evaluation, and implementation process of a new LMS. Besides that, we will share sample timelines that outline training sessions and all supporting resources such as handouts, support articles, demos, presentations, Help Desk knowledgebase, etc. to ease the transition and adoption for faculty and students. You will also learn about major trends shaping the continuous evolution of learning management systems such as hybrid-first learning, competency-based learning, policy/regulation, faculty empowerment, generative AI, etc.

### **Key Words**

Learning Management System (LMS), Needs Assessment, Feasibility Study, Implementation Process, Support/Training.

## AI-Empowered Teaching: A Model for GenAI Teaching Integration

### Presenter

Arturo Ozuna, Ed.D.

Tarrant County College – Connect Campus (Texas, US)

[arturo.ozuna@tccd.edu](mailto:arturo.ozuna@tccd.edu)

### Abstract

Generative AI (GenAI) tools can assist educators with various tasks including brainstorming course scenarios, aligning learning activities with outcomes, and creating feedback loops to facilitate the assessment of student learning. Utilizing the ASSURE Instructional Design Model (Heinich et al. 1999), educators can integrate GenAI tools into their teaching context by engaging in self-reflection, articulating goals, or objectives, and selecting methods or GenAI tools. Self-reflection entails educators recognizing existing proficiencies that align with GenAI integration. It involves identifying strengths such as digital literacy that can be leveraged to integrate GenAI technologies effectively. It also encompasses managing any potential individual deficiencies by creating partnerships or leveraging campus resources. Setting goals in this context is primarily about determining an appropriate level of engagement with GenAI.

For this process the SAMR model (Puentedura, 2006) provides a great framework to think about GenAI integration. SAMR stands for Substitution, Augmentation, Modification, and Redefinition, and it outlines four levels of educational technology integration. The model encourages educators to move beyond merely substituting traditional methods with digital tools, aiming instead for transformational uses of technology that redefine educational practices. However, these levels can also help educators determine what type of GenAI integration is most appropriate for their educational context. Selecting methods involves choosing the appropriate instructional strategies, media, and materials that will best facilitate the achievement of the learning objectives. In the context of selecting a GenAI tool for teaching and learning integration, this step involves evaluating and choosing a GenAI tool that aligns with an educator's teaching objectives and needs. Educators should consider evaluating tools on factors such as access, output quality, needs, and accessibility. By carefully considering these factors, educators can select a GenAI tool that enhances teaching and learning experiences, supports instructional goals, and meets the needs of their students.

### Key Words

Generative AI (GenAI), ASSURE Instructional Design Model, SAMR Model, Educational Technology Integration.



## Online Learning: Digital Entrepreneurship from Puerto Rico to the World

### Presenter

Leticia Pagán

Universidad Politécnica de Puerto Rico (Puerto Rico)

[lepagan@upr.edu](mailto:lepagan@upr.edu)

### Abstract

This presentation explains the creation, design, development, and results of a digital entrepreneurship online course. During a 12-week where students develop their projects, which include the business idea, creation of an ecommerce/web-based website, an emarketing plan, an ebusiness plan including proforma financial statements, an oral presentation, and a poster. Students enter a poster competition for all master's programs graduates and the prizes are published on the University's Website. The new course design, using four phases, has been successful because all students who have enrolled have successfully completed the course during the past three years.

Some strategies used to accommodate the needs of diverse students such as Hispanic and from other ethnicities and backgrounds were that the course was written in standard English, students participated in discussion/forums in English and Spanish, individual videoconferences, and phone meetings. Deadlines and timely assessments were part of the course evaluation. The professor is fully bilingual in English and Spanish, an asset for the university because it maximizes the language skills of its multicultural professors. The teaching methodologies guarantee the academic success of the student and the skills attainment by : (1) Creating the e-Commerce Website, (2) Creating the marketing plan, (3) Developing a project proposal to create, design, develop the applications by: (1) displaying the products and/or service, (2) managing or allocating the distribution of digital products, physical products and/or virtual services, and; (3) implementing the operation of a business through a secure and reliable business platform.

### Key Words

Online learning, online education, digital entrepreneurship, Puerto Rico, ecommerce.

# STUDENT | TECHNOLOGY INTEGRATION TRACK

A. Morales Acevedo, S. Saldaña Varela

## Viajes Académicos y Programas de Intercambio: Experiencias Bilingües costo efectivas que enriquecen el aprendizaje en Programas de Intercambio

### Presentadores

Alberto Morales Acevedo  
EDP University of PR (Puerto Rico)  
[amorales182@live.edpuniversity.edu](mailto:amorales182@live.edpuniversity.edu)

Sofia Saldaña Varela  
EDP University of PR (Puerto Rico)  
[ssaldana137@live.edpuniversity.edu](mailto:ssaldana137@live.edpuniversity.edu)

### Resumen

Por los pasados tres años hemos sido testigos de una experiencia enriquecedora académica y cultural para nuestro estudiantado. EDP University y *Southeast Missouri University* establecieron un acuerdo para el beneficio estudiantil de ambas instituciones, permitiéndoles realizar estudios semestrales como visitantes entre ambos recintos. Los estudiantes Sofia Saldaña y Alberto Morales tuvieron la oportunidad de participar de este intercambio educativo y compartir sus vivencias con el público presente. Los créditos tomados por ambos estudiantes abonaron a su desarrollo no tan solo para la industria del diseño, sino como artistas plásticos y con amplia visión en el mercado global. Esta colaboración entre ambas entidades les permitió experimentar la vida estudiantil universitaria compartiendo con otros alumnos de diferentes partes del mundo y estableciendo entre ellos amistades para toda la vida.

### Palabras claves

Intercambio educativo, artistas plásticos, viajes académicos.

D. Torres-Rolón, F. Serrano-Nieves

## Inter Robotics: Una asociación de tecnología y competencia

### Presentadores

Daniel Alexis Torres Rolón

Universidad Interamericana de Puerto Rico, Recinto de Bayamón.

[dtorres6003@interbayamon.edu](mailto:dtorres6003@interbayamon.edu)

Félix Ramón Serrano Nieves

Universidad Interamericana de Puerto Rico, Recinto de Bayamón.

[fserrano7273@interbayamon.edu](mailto:fserrano7273@interbayamon.edu)

### Resumen

Inter Robotics es una asociación estudiantil de la Universidad Interamericana de Puerto Rico, Recinto de Bayamón, fundada el 18 de septiembre de 2023. Esta asociación, se enfoca en traer a los estudiantes la oportunidad de aprender, enseñar y tener experiencia en robótica de diferentes formas, ya sea en proyectos especiales, talleres, actividades, labor comunitaria, etc. Se mostró un poco de la directiva, visión y misión, objetivos y un poco de la trayectoria. El enfoque principal de esta asociación se centra en el equipo de robótica bajo el nombre Inter Robotics, el cual se basa en una competencia que ofrece VEX Robotics, donde la misión es construir dos robots de diferentes dimensiones para ponerlos a prueba versus dos robots de otras universidades en partidas de 2 minutos.

Esta competencia colaborativa no se trata de destruir al oponente, si no que existen ciertas tareas dentro de la pista 12'x 12' las cuales generan puntos, al final de la partida gana el equipo que obtenga la mayor puntuación. No fue posible mostrar muchos visuales de los robots ya que la fecha de competencia se acercaba, pero ya competimos nacionalmente y quedamos Campeones invictos de torneo y ganadores de Robot Skills en nuestro primer año. Actualmente nos preparamos para la competencia mundial "2024 VEX World Championship" en Dallas Texas, desde el 28 al 30 de abril. A parte de esto, damos la oportunidad a los estudiantes para formar parte de otros tipos de competencias tales como NASA Minds y NASA Mining. En fin, de esta forma se diversifican las oportunidades de nuestros futuros ingenieros y así prepararlos extracurricularmente para su vida laboral y personal.

### Palabras claves

Robótica, Tecnología, Asociación estudiantil, competencia, VEX Robotics.

## Leveraging AI to Analyze Narratives around High-Speed Rail

### **Presenters**

Christian Deras  
Eastern Connecticut State University

Katherine Escalante  
Eastern Connecticut State University

### **Abstract**

We engaged in a cutting-edge project that leverages advanced AI technology, specifically the GPT 3.5 language model, to conduct a comprehensive analysis of narratives surrounding high-speed rail systems in the United States. This innovative approach involves processing extensive textual data from academic research, policy documents, and public discourse to extract key narratives, insights, and trends. We essentially built a new GPT model to be trained specifically on important high speed rail information and developments in order to apply the social science method of discourse analysis to analyze the state of affairs of the technology. Expanding upon our research, we were intrigued by the potential equitable applications of AI technology within discussions surrounding sustainable transportation systems. Employing a technique known as fine-tuning. This process and technique allowed us to develop and train a model to be able to identify and access real world equity failings.

Our approach proves to be highly cost-effective. Unlike traditional, time-consuming manual content analysis, our AI-driven methodology significantly reduces the resource investment required for discourse analysis. This cost-saving aspect is particularly beneficial for projects in resource-constrained environments, such as academic research within higher education.

### **Key Words**

AI technology, high-speed rail systems, academic research.

## Modelo de Desarrollo de Ecosistemas de Emprendimiento en Comunidades Escolares

### Presentadores

Dr. Alfredo Lebrón Kuri  
Universidad Ana G. Mendez - Recinto de Cupey (Puerto Rico)  
[alebron31@uagm.edu](mailto:alebron31@uagm.edu)

Delisse Ríos Camacho  
[drios72@email.uagm.edu](mailto:drios72@email.uagm.edu)

Nasheliany Montero Concepción  
[nmontero12@email.uagm.edu](mailto:nmontero12@email.uagm.edu)

Yeilianys Nieves Diaz  
[ynieves137@email.uagm.edu](mailto:ynieves137@email.uagm.edu)

### Resumen

Como parte de los esfuerzos realizados por el equipo ENACTUS UAGM Cupey en colaboración con miembros de la facultad de la División de Negocios Turismo y Emprendimiento de la Universidad Ana G. Méndez para crear un proyecto innovativo diseñaron un modelo para el desarrollo de ecosistemas de emprendimiento en comunidades escolares. Este incluye estudiantes, maestros y la comunidad, el cual a sido implementado exitosamente en la comunidad dos comunidades de Vega Baja la Escuela de Segunda Unidad Manuel Martínez y Madelcar Academy bajo la empresa social “Entrepreneurship for the Future”.

Como parte del modelo de desarrollo de comunidades emprendedoras se incluyen esfuerzos de desarrollo de mentalidad, actitudes y aptitudes emprendedoras a través de talleres de capacitación sobre emprendimiento, prácticas de negocios y tecnología en el aula. Esto, con el propósito de integrar actividades en los cursos dirigidas a desarrollar diversas formas de emprendimiento y llevar a la comunidad escolar al desarrollo de sus iniciativas. El modelo incluye un componente de apoyo para desarrollar y lanzar ideas emprendedoras que emanen de los procesos reflexivos y creativos de los miembros de la comunidad escolar. Además, incluye el desarrollo de una empresa social que pueda generar ingresos para sustentar la implementación del modelo y generar ingresos para reinvertirlos en la comunidad. En la implantación del modelo la empresa social constó de un desarrollo agrícola en los terrenos de las escuelas. Esta iniciativa tiene como objetivo generar ingresos y educar a los participantes en las diferentes fases del negocio agrícola, desde la producción hasta la comercialización y la reinversión de las ganancias.

### Palabras claves

Emprendimiento, ecosistema empresarial, desarrollo comunitario, apoderamiento, agricultura.