

# **2025 Institute for the Future of Education Conference (IFE 2025)**

**Monterrey, Mexico  
28-30 January 2025**



**IEEE Catalog Number: CFP25VX1-POD  
ISBN: 979-8-3503-5524-6**

**Copyright © 2025 by the Institute of Electrical and Electronics Engineers, Inc.  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP25VX1-POD
ISBN (Print-On-Demand):	979-8-3503-5524-6
ISBN (Online):	979-8-3503-5523-9

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## CONTENTS

**1. Teaching Calculus through Complexity.....1**

Helí Herrera López, Abraham Cuesta Borges

**2. Gamified logistics simulation for the advancement of decision making and complex thinking in learning environments.....7**

Leonardo David Glasserman-Morales, Jessica Alejandra Ruiz-Ramirez, Ernesto Armando Pacheco-Velazquez, Martina Carlos-Arroyo

**3. Enhancing Educational Equity: Leveraging NLP to Understand Diverse Student Perspectives in Engineering.....13**

Enrique Díaz de León López, Carmen Leticia Salazar Cano

**4. Experiments with Smart Greenhouse project implementing AI integrated with IoT Classes.....23**

Antonio Carlos Bento, Elsa Yolanda Torres-Torres, Claudio Patricio Cantú-Alanis, Daniel Eduardo Hinojosa-Alvarado, Diego Eduardo Villasana-Ajuria, Iván Burrola-Torres, Paulo de Jesús Ibarra-Carballo, Daniel Couto Gatti

**5. La innovación pedagógica en escuelas vulnerables: significados, barreras y oportunidades.....30**

Carmen Gloria Garrido, René Valdés, Juan Jerez, Mario Contreras

**6. Educational Trends in 21st Century Education.....35**

Viviana Monterroza Montes

**7. Innovating Education with ChatGPT: Strategies for Greater Engagement and Critical Thinking.....40**

Gabriela Espínola, Anahí Molina

**8. Innovative Methodology for the Integration of Emerging Technologies in Global Education: Mixed Realities, AI, Metaverse, and SDGs.....47**

Antonio Juarez, Jordi Rabago, Aida Pliego, Gabriela Salazar, Carlos Hinrichsen, Marietta Castro, Tomas Pachajoa

**9. Development of Digital Content for Flexible and Remote Instruction of the Use and Operation of Laboratory Equipment.....53**

Ana Mayela Ramos de la Peña, José Guillermo González Valdez, Oscar Aguilar

**10. Case Study of a COIL Project Collaboration between Universities in Costa Rica and Mexico.....57**

Carlos Gabriel Colin Flores, Betzaida Montero Ulate, Kattia Vasconcelos Vásquez, Yorleni Guevara Cruz

**11. RESKILLING DOCENTE 2.0: Un estudio de caso sobre la implementación del modelo en México.....68**

Victor Hugo Torres Fernández

**12. The Building Blocks of the Constructive Assessment of Learning in Higher Education: A Faculty Conception.....77**

- Claudia H Aguayo-Hernández, Alejandro Sánchez Guerrero, Patricia Vázquez-Villegas
- 13. Trends in Student Attrition in Private Universities: An Analysis in Ecuador.....85**
- Jonnatan Avilés-González, Fernando Córdova-León, Gabriela Duque-Espinoza, Julio Mosquera-Gutierrez
- 14. El aprendizaje personalizado como estrategia para la enseñanza de nociones de agregar y quitar en Educación Preescolar Unitaria.....88**
- Daniela Priego Hernández, Hercy Baez Cruz
- 15. Transforming the teaching of probability and statistics: The impact of AI-driven contextualization on architecture students' motivation.....98**
- Gerardo Rocha-Feregrino, Gibrán Sayeg Sánchez
- 16. Neuroeducation for Efficient Mathematics Learning....106**
- Maritza Peña-Becerril, Hannah Nahid Becerril-Guadarrama, Astrid Guadalupe Navarro-Rojas, Sandra Martínez-Peña, Claudia Camacho-Zuñiga
- 17. Understanding the migration phenomenon through international, intercultural and interdisciplinary implementation.....112**
- Elena Rondos Casas, Pilar Morera Basuldo, Maritza Peña-Becerril, Viviana Guerrero-Benalcázar
- 18. Enhancing Communication Skills in Higher Education through Artificial Intelligence and Virtual Reality.....118**
- Roberto Gomez Tobias, Jorge Alvarez, Martha Lorena Martinez Torres, Javier Armando Gonzalez Lozano
- 19. TextAR: Una Aplicación para mejorar Comprensión Lectora de Textos de Medicina a través de Realidad Aumentada....126**
- Heydy S. Robles Noriega, Gustavo A. Chacón Contreras
- 20. Integration of Design Thinking and Challenge-Based Learning for Teaching Design of Experiments to Engineering Students with a Non-Governmental Organization Partnership.....135**
- Pilar Rodríguez-Dobarganes, Andrea Escobar-Bazaldua, Mónica Flores-Martínez, Eduardo Caballero-Montes
- 21. Perception of the integration of Artificial Intelligence and other emerging technologies in Dominican education from an ethical perspective.....142**
- Edwin Santana-Soriano
- 22. Gamification in Law Education as a Strategy to Stimulate Academic Engagement and Promote Lifelong Learning.....149**
- Marisol Alcaide-Lopez, May Portuguez-Castro
- 23. Empathy for Engagement in The Zone of Proximal Development in Continuing Education Programs: An “Unsuccessful” Study, but Not So Much.....155**
- Pablo Andrés Torres Campos, Irma del Carmen Torres Mata, José Noé Miranda-Becerra, Patricia Vázquez-Villegas
- 24. Corpus Lingüísticos y Competencia Traductora: ¿La pareja perfecta?.....161**
- Adriana González-Hernández
- 25. What Matters is The Emotion: Natural Leadership to Promote Well-Being in School.....171**
- Humberto Charles-Leija, Mario Toledo, Carlos Castro

- 26. Augmented reality as a didactic resource in middle-high school education in Ambato-Ecuador.....176**  
Gustavo Fernández Villacrés, Luis Jacho Chaux, Fernanda Guerrero Aguilar, Amilcar Trujillo Quinto, Víctor Teneda Garces, Tatiana Borja Gavilanes
- 27. Evaluating Continuing Teacher Education: A Systematic Review.....183**  
Luis Felipe de la Vega R.
- 28. Attitudes toward professionalism in psychology students at Tecnológico de Monterrey.....194**  
Brenda Ivonne Domínguez Vásquez, Xochitl Garza Olivares, Daniela Aguilar de León
- 29. A Global Challenge-Based Learning Initiative Applying Enabling Technologies for Entrepreneurship.....199**  
Linda Elizabeth Ruiz, Juan Ramón Campos-Blazquez, Claudia Lizette Garay-Rondero, Marta Torres-Polo
- 30. Innovation in Information Resources Management. The experience of the Buenos Aires Technological Institute.....206**  
Ivan Latorre, Lucía Belen Medina, Martín Guzmán Álvarez
- 31. How education systems can learn more successfully: orchestrating intelligence at scale.....211**  
Geoff Mulgan, Martin Valdivia
- 32. General perspectives of Audiovisual Translation in Peru.....225**  
Edwin Eduardo Sagastegui-Toribio, Ana Cecilia Gonzales, Diana Magcelene Lozano Arredondo, Miguel Medina, Mirtha Giovanna Montoro Ponce, Roberto Jesus Roldan Cespedes, Augusto Cesar Mescua Figueroa, Luz Vilca Aguilar
- 33. Prompting Literature Review: The Impact of Transformer Models and ChatGPT on Prompt Engineering and AI Research Publications.....232**  
Daniel Camacho Leal, Azael Capetillo, David Güemes Castorena
- 34. Analysis, design and development of a hybrid English program for tertiary education.....238**  
Erick Aravena, Rosa Cerda, Gabriel Morales
- 35. Empowering Students, Not Just Technology: Unleashing the Power of Self-Efficacy to Drive Self-Regulation in Distance Learning Education.....250**  
Boris Christian Herbas Torrico, René Cabero Villazón, Marco Antonio Cueto Daza
- 36. Enhancement of Intrinsic Motivation through the integration of Autonomy-Mastery-Purpose elements in the Design of Challenge Based Learning.....258**  
Blanca Bazán-Perkins, Angélica Flores-Flores, Luis Edward Mandujano-Camacho, Andrés Arispe-Oliver
- 37. A Systematic Review: Fansubbers and Audio-visual Translation.....263**  
Ana Cecilia Gonzales Castañeda, Luz Mercedes Vilca Aguilar, Edwin Eduardo Sagástegui Toribio
- 38. Design of virtual and physical automotive concepts for virtual assembly plant.....272**  
Rubén Vázquez Esquivel, Alejandro Acuña López, Carlos Alberto Carlos Almaguer
- 39. Narración de cuentos con Book Creator para favorecer la expresión y participación en un grupo de educación preescolar.....279**  
Tania Garcés Ortiz, Hercy Baez Cruz

- 40. Aproximaciones para una resignificación de la lectura en jóvenes de Nivel Medio Superior tras contexto pandemia.....289**  
Lucero Margarita Aguirre Valdés
- 41. AI Literacy and Proficiency: An Industry Reports Analysis to Achieve Educational Innovation and Organizational Change.....296**  
Daniel Camacho Leal, Azael Capetillo, David Güemes Castorena
- 42. Attending with SPSS, the teaching of English through Nahuatl as a base language in San Miguel Canoa.....302**  
Guadalupe Mercado Vargas, María del Carmen Castillo Salazar
- 43. Systematic analysis of gamification tools with augmented reality applied to education.....307**  
Rodrigo Aryan Hernández García, Cesar Augusto Mejía Gracia
- 44. Derecho fundamental a la educación en la Generación Z: Inteligencia Artificial y nuevos desafíos tecnológicos.....316**  
Ulises Medina Álvarez, Monserrat Pérez Carvajal, Karina Méndez Contreras
- 45. Búsqueda Autodirigida en el proceso vocacional de la educación media superior.....322**  
Jesús-Inés Beltrán-Aispuro, Jesús Madueña-Molina, María-Concepción Mazo-Sandoval, Enrique Ibarra-Aguirre
- 46. Continuous and Experiential Learning through Autonomous, Sustainable, and Applied Research for Innovation Using a Scalable Web Platform.....330**  
Jordan Blancas Sánchez, María Camborda Zamudio, César Quispe López
- 47. Academic burnout, professional commitment and psychological capital in undergraduate clinical and health psychology students.....336**  
Carlos Rodríguez-Aguirre, Daniela Aguilar de León, Xóchitl Garza-Olivares
- 48. The Impact of the Use of a Multimodal Learning System in Academic Achievement Obtained by Higher Secondary Level Students Enrolled in a Finance and Accounting Course.....342**  
Alejandro M. Torres, Valeria Cantú González, Leonardo D. Glasserman Morales, Rosa Elena Rodríguez González
- 49. New realities and flipped classroom, a case study in higher education.....353**  
Sergio Iván Vilchis Hernández, Sandra Gudino Paredes
- 50. Integration of Cardiovascular Risk Assessment as a Strategy for Awareness and Habit Improvement During University Studies.....358**  
Anayansi Escalante-Aburto, Maritza Peña-Becerril
- 51. La Isla Secreta, un videojuego para la mejora de las habilidades lectoescritoras en estudiantes.....364**  
Carlos Miranda-Palma, Lizzie Narváez-Díaz, Victor Chi-Pech
- 52. Enhancing University Students' Entrepreneurship in Biotechnological Product Development.....370**  
Mariel Calderón-Oliver, Anayansi Escalante-Aburto, Maritza Peña-Becerril
- 53. How Do You Create a Reader? Family Libraries, Cultural Capital, and Genesis of Interest in Reading: Statistical Analysis of PIRLS and PISA Studies in 20 Countries over 15 years.....377**

- Joaquín Rodríguez-López
- 54. Stress and Performance in Face-to-Face and Asynchronous Oral Assessments.....387**  
Claudia Hernandez Mena, Juan P. Trevino, Yamil Burguete, Edna L. Viveros-Nava, Nicolas Amado-Moranchel, Gerardo Rocha-Feregrino, Elizabeth Mena-Aviles
- 55. Exploring the Determinants of Satisfaction with the Tec 21 Educational Model Among Tecnologico de Monterrey Graduates.....395**  
Jorge Mora-Rivera, Noemí Vásquez-Quevedo
- 56. The importance of adopting competency-based learning in the curricular innovation of teacher training schools.....400**  
Angelica Janeth Cortez Soto, Yolanda Heredia Escorza
- 57. ChatGPT as a support and search tool for research-based learning.....410**  
Mariel Calderón-Oliver
- 58. Integrating Mixed Reality Technologies in Learning Renal Anatomy: Advancing Educational Resource Development for Training Healthcare Professionals.....416**  
Marina Vicario, María Elena Ceballos, Fernando Torres, Janice Arias
- 59. Assessment of Institutional Support and Its Influence on the Prevalence of Bullying.....422**  
Paulina Calvillo Torices, Ingrid García Pinzón
- 60. Chan Vun: Technology-based learning for indigenous schools without internet access: the case of schools.....432**  
Yolanda Heredia-Escorza, José Ramón Morales-Ávalos, Francisco Díaz-Estrada, Melany Hatziry Leal-Ríos, Cynthia Pasquel-López
- 61. Emotions in Clinical Simulation: Chromatic Scales Comparative Study.....439**  
Nancy de los Angeles Segura-Azuara, Fernando de Jesus Garza-Arriaga, José Guillermo Guzman-Segura
- 62. Integrating Spatial as an Immersive and Innovative Educational Platform among Students in a Mexican University.....445**  
Iris Cristina Peláez-Sánchez, Silvia Alejandra Andrade Rodríguez, Leonardo David Glasserman-Morales
- 63. Open Education with Active Pedagogies in Innovation Laboratories: Roles, activities, skills and methodologies.....456**  
Katiuska Fernández Morales, Darlene González Miy
- 64. Adaptation of Learning Paths in Online Programming: Clustering and Descriptive Analysis in Engineering.....467**  
Juan Felipe Calderón, César Villarreal, Danilo Leal, María Elena Truyol, Mónica Quezada, Claudia Bascur
- 65. Enhancing student success: Exploring the impact of novel mentoring strategies on life purpose reflection and goal setting.....474**  
Ana María Pinilla Torres, Veronica Garcia Saucedo
- 66. Gradescope as a tool to improve assessment and feedback in Engineering.....482**  
J.I. Hidalgo-Reyes, Jorge Alvarez, L.F. Guevara-Chavez, Zahira Gabriela Cruz-Netro

- 67. Propuestas de mejora para el Plan de Acción Tutorial para atender síntomas de Burnout en estudiantes de ingeniería.....489**  
Raquel Castro, Joaquín Reyes, Susana Bueno, Cristina Barba
- 68. Gamification in e-Learning Graduate Education: A Mixed-Methods Analysis of Its Impact on Academic Performance and Student Satisfaction.....499**  
Giomara Sevilla-Campoverde, Paola Miranda, Josué Pacheco-Chérrez
- 69. Enhanced Learning with Artificial Intelligence: a comparative study in medical students.....506**  
Nancy de los Angeles Segura-Azuara, Fernando de Jesus Garza-Arriaga, Jose Guillermo Guzman-Segura
- 70. Insights from a Dynamic KSA Taxonomy Framework: Top 10 Wanted Knowledge, Skills, and Abilities for the INFOCOMM Sector in Mexico.....514**  
Jose Daniel Azofeifa, Valentina Rueda-Castro, Luis Jose Gonzalez-Gomez, Sabur Butt, Julieta Noguez, Hector G. Ceballos, Patricia Caratozzolo
- 71. MoTE: Development of a Tool for Monitoring of sTudent Engagement.....525**  
Jorge Maldonado-Mahauad, Felipe Mendieta, Carlos Muñoz, Carlos Alario-Hoyos
- 72. Complex Thinking through Social Entrepreneurship in Students of a Public University.....534**  
Margarita Gómez Mota, Gabriela Torres Delgado
- 73. A new way to evaluate the impact of Research-Based Learning (RBL) and develop competencies in higher education.....543**  
Adriana Erika Martínez-Canton, Victoria Ubici, C.J. Diliegros-Godines, Mario Adrián Tienda-Vázquez
- 74. A Novel Model of Challenge-Based Learning for the Development of Skills of the Future.....551**  
Miguel Ramírez-Cadena, Juana I. Méndez-Garduño, Israel U. Cayetano-Jiménez, Diana A. Martin, Araceli Martínez-Ortiz, Jorge Membrillo-Hernández
- 75. Entrepreneurial Intention: The influence of Perceived Attractiveness and Emotional Support.....558**  
Hugo A. Alvarez-Perez, Linda Elizabeth Ruiz, Aldahir Caballero-Campbell
- 76. Continuing education programs for the development of lifelong learning competencies.....568**  
Yardena Y. Arabit-Talancón, José Noe Miranda-Becerra, Cristóbal Gaytán Padrón, Patricia Vázquez-Villegas
- 77. Enseñar ciencias y responsabilidad social. Una experiencia de aprendizaje-servicio.....576**  
Elena Arbués Radigales
- 78. The “Journey” of the XR Designer: Exploring Immersive Learning Experience of Virtual and Augmented Reality in Classrooms.....583**  
Carlos Alberto González Almaguer, Verónica Saavedra Gastélum, Anders Berglund, Jorge Peñalva Soto, Olaf Román, Natalia Frías Reid, Claudia Zubieta Ramírez
- 79. Lëttëra 2.0: Enhancing Reading Skills through Gamification and Technology.....587**  
Emilia Leal Uhlig, Xochitl Cruz Vargas, May Portuguez-Castro

**80. Enhancing learning in engineering using real kinematic scenarios supported by STEM, data science and AI.....593**

Omar Olmos López, Santa Esmeralda Tejeda Torres, M. A. López-Mariño, Carlos Astengo Noguez, Manuel Pardo Regueiro, Alfonso Serrano Heredia

**81. Revolutionizing education in operations management: using gamification to boost operational efficiency and supply chain management.....602**

John Cleveland, Cristian Saavedra-Acuna, Monica Quezada-Espinoza

**82. Effectiveness and usefulness sense of collaborations applying COIL methodology with Mexican and Ecuadorian university students.....611**

Isaac Juarez-Acosta, Maritza Peña-Becerril, Alan Miralrio, Viviana Guerrero-Benalcázar, Daniela Ziritt, Andrea Ayala Trujillo

**83. La universidad del futuro desde la voz de sus actores: el caso de la Universidad Autónoma Metropolitana, México.....619**

Noé Abraham González-Nieto, Margarita Espinosa-Meneses, Caridad García-Hernández

**84. Harnessing Open Language Models: A Systematic Literature Review Unleashing AI's Potential for a Smarter Future.....624**

Iván Miguel García López, María Soledad Ramírez Montoya, José Martín Molina Espinosa

**85. Digital shadow as a didactic resource for control engineering.....636**

Debbie Hernandez, Marybeth Flores-Vazquez, Claudia Hernandez-Mena, Mariana Olivares Avalos, Genisson S. Coutinho, Jorge A. Reyes-Avendaño, Vinicius do Rego Dias, Luis F. Morán-Mirabal

**86. Proposal for a generic serious games toolkit: integrating qualitative insights and Agent-Based Modeling.....643**

Virginia Rodés-Paragarino, Andre Bester, Lucía Margarita Rabago-Mayer, Ernesto Armando Pacheco-Velazquez

**87. Community Leaders' Perception of Service Learning.....653**

Selene Itzel Vergara Segura, Elsa Catalina Olivas Castellanos

**88. Visual Generative AI: Integrating AI-Generated Video Avatars in Business Education.....660**

May Portuguez-Castro, Francisco Rivera Scaramutti, Giulio Marchena Sekli, Edy Esther Valcázar Montenegro, César Huasopoma Laurente, Carolina Pretell Pardo, Juan O'Brien Cáceres

**89. Social Entrepreneurship Competences for the Development of Complex Thinking: A Comparative Study by Gender in Postgraduate Students.....668**

Maria Soledad Ramírez-Montoya, Sandra Martinez-Perez, Laura Patricia Zepeda-Orantes

**90. Machine learning in pediatric growth assessment.....677**

Mauro Rodriguez-Marin, Luis Gustavo Orozco Alatorre

**91. The gender perspective in preschool teacher training at the Miguel F. Martínez Normal School in Nuevo León, Mexico.....686**

Yolanda Heredia-Escorza, María Eugenia Gil-Rendón, Francisco Díaz-Estrada, Cynthia Pasquel-López

**92. A Qualitative Exploration of Supervisory Practices and Strategies for Developing Clinical Judgment in Psychology.....692**

- Xóchitl Garza-Olivares, Brenda Ivonne Domínguez Vásquez, Carlos Rodríguez-Aguirre
- 93. Teachers' Perceptions, Attitudes, and Beliefs Regarding the Use of AI in Higher Education: A Multigenerational Analysis in Guatemala.....696**
- Ana María Saavedra, Azeneth Patino, Gerardo Ibarra-Vazquez
- 94. Impact of performance evaluation on Mechatronics engineering students.....704**
- José M. Nieto-Jalil, Luis C. Félix-Herrán
- 95. Enhancing Cybersecurity Competencies in Healthcare: An Interdisciplinary Approach to Patient Safety and Data Integrity.....711**
- Luanne Billingsley, Andres Calderon
- 96. Instrument to determine the didactic strategies, technological tools and digital resources used in teaching practice to promote divergent thinking.....719**
- Mercedes Rosalía González Arreola, Katiuska Fernández Morales
- 97. Exploratory Simulations for Confirmatory Analysis: English Auditory Word Learning.....727**
- Karl Neergaard
- 98. Measuring Ecological Intelligence of University Students.....737**
- Lilia Artemisa Cortez-Angulo, Marcia Lorena Rodríguez-Aldana, Iván Pacheco-Soto
- 99. Impact of the Accreditation of Academic Programs of Higher Education Institutions on the Economic Development of Mexico: A Statistical Analysis.....745**
- Ulises Ojeda Sanchez, José Manuel Nieto Jalil, Adrian Israel Tec Chim, Gustavo Sánchez García, Cesar Saldaña Carro, Juan Pablo Reyes Aldana
- 100. Horizons of Education 5.0 with AI through Strategic Leadership in the Global Context: Case Study Research.....752**
- Ramírez-Montoya M.S., Maraboto, J. M., Enciso, J., Miranda J
- 101. Brecha Generacional y Uso de la Inteligencia Artificial Generativa en la Educación: Un Estudio de Varianza.....760**
- Melissa Castillo Ubach, Cindy Jiménez-Picado
- 102. The Use of Simulators for Teaching Fundamental Supply Chain Concepts.....771**
- Carlos Alberto Gonzalez, Carlos R Gómez, Verónica Saavedra Gastélum, Rommel Pacheco Hernández, Alondra Mendoza Madrigal, Juan Manuel Murillo López
- 103. The self-directed learning of English teachers at a Mexican teaching training college.....776**
- Dayannis Tamayo-Preval, Jessica Alejandra Ruiz-Ramirez
- 104. Escape room como estrategia de enseñanza aprendizaje del concepto reacciones químicas para alumnos de bachillerato.....785**
- Ana Belen González López
- 105. Remote laboratory: evaluation as a pedagogic and didactic resource.....792**
- Debbie Hernandez, Eli Abraham Vazquez, Marybeth Flores-Vazquez, Jorge A. Reyes-Avendaño, Janet A. Gutiérrez-Uribe
- 106. The Virtual Teaching Folder and Its Impact on Educational Practice: Opinions of Early Childhood Education Teachers.....803**
- Yrene Gloria Chamorro Bacilo, Heraclio Campana Añasco, Davis Velarde-Camaqui

- 107. Semantic Web in Medical Diagnosis, the Complexity Applied: A Systematic Literature Review.....809**  
Luis Clemente Jiménez-Botello, Hugo Rozo-García, Francisco José García-Peña, María Soledad Ramírez-Montoya
- 108. Using Artificial Intelligence to Develop Research Competencies: A Tool to Avoid Academic Dishonesty.....814**  
Ángel Gustavo López Montiel
- 109. Women, digital tools and education. A systematic review of the literature.....817**  
Alma Delia Buendía Rodríguez
- 110. Breaking Barriers: Smartphone sensors, mobile technology in online teaching of differential equations.....824**  
Adrián Isrrael Tec Chim, José M. Nieto-Jalil, Juan M. Martínez Huerta, Ivan Gutiérrez Crúz
- 111. Implementation of the Open Educational Model to develop Complex Thinking in university students.....831**  
Isolda Margarita Castillo-Martínez, Alejandra Carreon-Hermosillo, Gloria Concepcion Tenorio-Sepulveda
- 112. The Effects of an Educational Intervention Based on Active Learning of Self-Regulated Learning Skills in Open Higher Education.....837**  
Daniela R. Barajas Torres, Gabriela Torres Delgado