IST 2023 CONFERENCE

MARCH 3RD, FRIDAY

Program Book

TABLE OF CONTENTS

ABOUT THE CONFERENCE

The Instructional Systems Technology (IST) conference is a free, student-run conference, funded by IU Funding Board, that offers graduate students a safe venue to gain experience in presenting, organizing, and attending professional conferences. In years past, attendees have included residential and distance students, alumni, and faculty of the IU IST department as well as IST students and faculty from other universities and students from various IU departments.

The 23rd Annual IST Conference will be held in-person and virtually on March 3, 2023. This year's theme is: Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts.

Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts

ORGANIZING COMMITTEE

Conference Planning Committee

LIN CHU
Conference Chair

ALYSE HARRIS
GIST President & Conference Vice-Chair

DR. GAMZE OZOGUL
Faculty Advisor

Conference Planning Committee

EMANUEL ARNOLD
Creative Team Lead

KEUNJAE KIM
Advertising Team Lead

VANESSA JOHNSON
Hospitality Team Co-Lead

LAUREN LEVENDOSKI
Hospitality Team Co-Lead

CHEN ZHOU
Proposal Review Team Co-Lead

CARRIE FENG
Proposal Review Team Co-Lead

MEIKA BILLINGS DOPWELL
Events Team Lead

Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts

KEYNOTE SPEAKERS

Dr. Michael K. Thomas

University of Illinois Chicago
Associate Professor, Department of Educational Psychology

Culturally Grounded Design

March 3, 2023, 8:45-9:45 AM

Dr. Michael Thomas is an associate professor in the Department of Educational Psychology at the University of Illinois at Chicago. His research focuses on the cultural dimensions of technology implementation in learning contexts and what this means for the design of technology-rich innovations for learning. Three key questions with respect to this are (a) What are the central concerns of teachers, trainers, and other stakeholders regarding the implementation of technology in learning contexts? (b) What do they do to continually resolve these concerns? and (c) In what ways does culture play a role in the design and implementation of technology-rich innovations? He is particularly interested in video games and gamification in learning environments. He has expertise in qualitative research in general and grounded theory in particular. Before joining UNCC, he taught instructional technology and research methodology at the University of Oklahoma, the University of Wisconsin-Madison, and the University of North Carolina, Charlotte. He has also been an ESL/EFL teacher in New York City Public Schools and has taught overseas.

Dr. Sonny E. Kirkley

Indiana University–Purdue University Indianapolis (IUPUI)
Adjunct professor, Luddy School of Informatics, Computing and Engineering

Designing and Developing for High-stakes Environments

March 3, 2023, 3:00-3:50 PM

Dr. Sonny Kirkley is an innovator, entrepreneur, designer and co-founder of seven technologies companies, including IU's first two spin-out companies — Information in Place Inc. and WisdomTools Inc. — where he served as CEO for each a combined 16 years. He is president of two startups in the public safety sector with connections to IU — Zenext (voice AI) and iMixedReality (augmented reality) — and has served as mentor to numerous company founders. Kirkley has published and presented extensively in the areas of human-computer interaction design, augmented and mixed reality, advanced technologies for performance support and instruction, serious games, and education and training across industry sectors. Much of his career has been focused on learning technologies implementing programs in diverse settings, including Fortune 100 Companies and K-12 schools. He holds a Ph.D. and a master's degree in instructional systems technology from IU Bloomington and a bachelor's degree in political science from the University of North Carolina at Pembroke. He is an adjunct assistant professor of human-computer interaction in the Luddy School of Informatics, Computing and Engineering at IUPUI.

FACULTY PANEL

FRIDAY, MARCH 3, 1:00-1:50 PM

AUDITORIUM

IST Conference 2023

DR. JOSHUA DANISH – PANELIST
Professor, Learning Sciences Program

Dr. Danish is a professor with the Learning Sciences Program. The overarching theme in his program of research is an examination of how people learn through activity. His research examines how individuals coordinate their actions and ideas within these complex settings, and how this can lead to learning. A major focus of his work has been examining how young students (5-7 years old) create representations while learning about complex science concepts.

DR. KRISTA GLAZEWSKI – PANELIST
Professor, Instructional Systems Technology Department Chair

Dr. Glazewski is the Professor of Instructional Systems Technology in the School of Education at Indiana University. Her research areas includes learning through complex problem solving, problem-based learning, scaffolding, and technology-rich problem solving. Her work informs the ways in which we can develop instruction to support learning through complex problem solving with problem-, project-, case-, and inquiry-based learning.

DR. DANIEL HICKEY – PANELIST
Professor, Learning Sciences Program

Dr. Hickey is a professor with the Learning Sciences Program, Research Scientist with the Center for Research on Learning and Technology, Senior Fellow at the IU Center for Applied Cybersecurity, and Affiliated Faculty with IU Cognitive Science program. He uses theories and methods from the Learning Sciences to uncover new solutions to enduring challenges in motivating, assessing, and recognizing learning, mostly using cutting-edge technologies.

DR. KYUNGBIN KWON – PANELIST
Associate Professor, Instructional Systems Technology Program

Dr. Kwon is the Associate Professor of Instructional Systems Technology. His work focuses on facilitating positive interactions among students in contexts of Computer-Supported Collaborative Learning (CSCL) and designing effective instructions for computational thinking (CT). His research accomplishments and interests emphasize innovative uses of instructional technologies to establish learning communities and enhance learning performances.

DR. GAMZE OZOGUL – MODERATOR
Associate Professor, Instructional Systems Technology Program

Dr. Ozogul is the Associate Professor of Instructional Systems Technology in the School of Education at Indiana University. Her research lies in the educational evaluation and learning assessment. In her research, she operationalizes instructional design and development principles, applies these principles to various pre-college and higher education settings in different delivery modalities, and investigates students' outcomes for learning, retention, and perceptions.

Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts

ALUMNI PANEL

FRIDAY, MARCH 3, 2:00-2:50 PM

AUDITORIUM

IST Conference 2023

DR. AI-CHU ELISHA DING
University of Georgia

Dr. Ai-Chu Elisha Ding is an Assistant Professor of Learning Design and Technology in the Department of Workforce Education & Instructional Technology at the University of Georgia. She received her Ph.D. from IUB with dual major in IST and Literacy, Culture and Language Education. Her research examines the innovative and equitable technology integration and professional development in K-12 education. She has explored the use of game-based learning (GBL), virtual reality (VR), and elementary-level computer programming in K-12 education.

DR. CHÉRISSE MAHABIR-CLETUS
St. George's University

Dr. Chérisse Mahabir-Cletus is currently an Assistant Professor and Instructional Designer at St. George's University. She is passionate about making education inclusive and accessible, and has a keen interest in the adoption of technology in primary and secondary school education, as well as higher education settings. Dr. Mahabir-Cletus completed her Ed.D. and MS specializing in IST and Adult Learning at IUB. She also holds a BBA in Computer Information Systems, and a Post-Graduate Certificate in University Teaching and Learning.

DR. KEVIN MCCRACKEN
Indiana University–Purdue University Indianapolis (IUPUI)

Dr. Kevin Mc Cracken serves as the Director of IUPUI's Adaptive Educational Services, the student disability services office for students on the IUPUI, IUPUC, and IUFW campuses as well as students in the IU School of Medicine at all nine statewide sites. Previously, he served as the Associate Director, Graduate Admissions, Alumni Affairs, and Community Engagement at IUPUC. He holds a B.S. with honors in psychology, an M.S. Ed. in counseling/counselor education, an M.B.A. in general management, and an Ed. D. in IST, all of which were awarded by Indiana University.

DR. JENNIFER PARK
University of North Carolina Wilmington

Dr. Jennifer Park is an Assistant Professor of Instructional Technology at the University of North Carolina Wilmington. She earned her Ph.D. in IST with minors in Inquiry Methodology and Organizational Behavior and Human Resource Management at IUB. Her research focuses on innovations in the workplace, virtual teams, online training and development, mentoring, and instructional design. Early in her career, she was a business analyst and market research consultant at multinational companies. She was recently selected as 2022-2023 Open Educational Resources (OER) Fellow.

DR. KIMBERLY VINCENT-LAYTON
California Polytechnic State University, Humboldt

Dr. Kimberly Vincent-Layton is the lead educational developer/designer in the Center for Teaching and Learning (and Academic Technology). She received Doctorate in Education in IST with a minor in Adult Education from IUB. Her background spreads across the intersection of teaching, professional development, instructional design, educational technology, and most of all, student learning success. She enjoys discovering and creating learning and community-building opportunities that are supported by modern technologies.

Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts

CONFERENCE SCHEDULE

Session	Time	Room Number	Presenters	Title
Breakfast	7:30-8:15	Atrium		
Welcome	8:00-8:10	Auditorium	Lin Chu, Alyse Harris, Gamze Ozogul	
Session 1	8:15-8:40	2140	**Umida Khikmatillaeva**, Belle Li	Getting Viral on Social Media: Exploring Chinese Language Edutubers' Perceptions and Practices
		2275	**Tripp Harris**, Hyejeong Lee, Daniel Hickey	Assessment Principles, Formats, & Levels for Online and Open Learning Contexts
Keynote Speaker 1	8:45-9:45	Auditorium	**Dr. Michael Thomas** Dr. Amy Pickard	Culturally Grounded Design
Coffee Break	9:45-10:00	Balcony		
Session 2	10:00-10:55	2102	**Kevin McCracken**	An Analysis of Higher Education Faculty Concerns Regarding a Universal Design Initiative
			Sohheon Yang, Minhwi Seo, Pei-Shan Hsieh	Improving the Consistency of Communication with Students: Needs Analysis for the Office of Diversity, Equity, and Inclusion (DEI)
		2140	**Xiaoying Zheng**, Zixi Li, Curt Bonk, Meina Zhu, Thomas Reynolds	Investigating South American Massive Open Online Course (MOOC) Instructors' Designs Supporting SDL
			Chen Zhou, Chen Feng, Kyungbin Kwon	Promoting Reflection in Project-based Learning: A Design Case of e-Portfolio for a Statistics Class
		2271	**Qianxu Morgan Luo**, Daniel Hickey	Proctor-Free Culturally-Sustaining Formative and Summative Assessment in Fully Online Secondary Contexts
			Tripp Harris, Tracey Birdwell	New approaches for studying multidimensional use of classroom space: A pilot study of three classroom technologies
		4112	**Amelia Ijiri**, Belle Li	Instructional Design for Immersive Language Learning
			Paula Marcelle, Mattew Landreth, James Renfro, Kimberly Tarvis	Chewing on Macros: The Design of a Nutrition Program

Session	Time	Room Number	Presenters	Title
Sessons 3	11:00-11:55	2102	**Chen Zhou,** Kyungbin Kwon, Keunjae Kim, Thomas A. Brush, Abhijeet Muralidharan, Minhwi Seo	Embodied Programming Experience in Computational Thinking Development: Examination on Effectiveness of Augmented Reality and Bee-bots
			Minhwi Seo, Hyejeong Lee	Decision-making Mechanisms: A Study in Boundary Crossing
		2140	**Elizabeth Boling,** Kennon Smith	Design Intentions and Knowledge in Untutored Sign-makers: Implications for Design Pedagogy
			Matthew Brown, Dilnoza Kadirova	Preparing Preservice Teachers to Teach Computer Science: A Design Case
		2275	**Florentina Closser,** Erin Wagner	Hands-on Electromagnetic Technology Lessons for Pre and Early College Students
			Taufik Slamet, Thomas Brush, Kyungbin Kwon	Assessing the effects of digital leaderboard in gamified online discussions
		4112	**Shannon Cooper**	Using Authentic Learning to Create a Dedicated Clinical Ultrasound Online Curriculum for Physician Assistant Students
			Yichuan Yan, Madeline Blackwell	Learning the needs in surgery to make progress in education
Poster	11:30-11:55	Atrium	**Tripp Harris,** Merve Basdogan	Usage of a Student Technology Center
			Joey Wu, Kyle Boom Hower, Eunkyoung Cha, Jamaal S. Matthews, DeLeon L. Gray	How do Mathematics Teachers Support Student Belonging Multidimensionally? A State Space Grid Analysis
Lunch	12:00-1:00	Atrium		
		2140	**Dr. Faridah Pawan**	International Students Affinity Group & Professional Mentorship
		2275	**Prof. Elizabeth Boling**	Students & Alumni of Color Affinaty Group Lunch
Faculty Panel	1:00-1:50	Auditorium	Drs. Joshua Danish, Krista Glazewski, Daniel Hickey, Kyungbin Kwon, Gamze Ozogul	
Alumni Panel	2:00-2:50	Auditorium	Kimberly Vincent-Layton, Ed.D., Chérisse Mahabir-Cletus, Ed.D., Ai-Chu Elisha Ding, Ph.D., Jennifer Park, Ph.D., & Kevin McCracken, Ed.D.	

Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts

CONFERENCE SCHEDULE

Session	Time	Room Number	Presenters	Title
Session 4	3:00-3:55	2102	**Daria Smyslova**	Inspiring AI Curiosity
			Hyejeong Lee, Minhwi Seo	Equity in Computer Science Education: Social and Cultural Background Differences in Computer and Information Literacy
		2140	**Lin Chu,** Jiyoung Kim, Anne Leftwich, Tamara Moore, Kristina Tank, Barbara Fagundes, Zarina Wafula, Sohheon Yang	Investigating Computational Thinking Competencies in an Unplugged Task Design - An Exploratory Single Case Study
			Daniel T Hickey, Qianxu Morgan Luo	ChatGPT versus Online Learning
		2275	**Vanessa Johnson**	An Examination of Interest Development and Intrinsic Motivation in Ph.D. Students
			Keunjae Kim, Kyungbin Kwon, Haesol Bae, Ottenbriet-Leftwich, Krista Glazewski, Florentina Closser, Minji Jeon	Exploring the middle school students' common preconceptions of AI concepts: "AI is a cure-all solution!"
Keynote Speaker 2	4:00-4:50	Auditorium	**Dr. Sonny Kirkley** Dr. Curt Bonk	Designing and developing for high-stakes environments
Closing Remarks	5:00-5:15	Auditorium	Lin Chu, Alyse Harris, Gamze Ozogul	
Dinner	5:30-7:00	Atrium		

ACKNOWLEDGMENTS

Learning for Progress, Teaching for the Future, and Designing for Diverse Contexts