

REBECCA M. QUINTANA, PHD

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**Also published as Cober*

I am an Assistant Professor of Education Practice at the Marsal Family School of Education at the University of Michigan. My research encompasses social learning in online and immersive settings and the design of technology-rich learning environments that are equitable and inclusive.

EDUCATION

- 2017 **PhD**, Doctor of Philosophy, University of Toronto, Ontario Institute for Studies in Education
Dissertation: *The role of visual representations in a Knowledge Community and Inquiry curriculum*
Committee: James D. Slotta (chair), Shaaron Ainsworth, Lawrence Bencze, Jim Hewitt
- 2012 **MA**, Master of Arts in Education, University of Toronto, Ontario Institute for Studies in Education
Thesis: *The role of aggregate representations in scaffolding collective inquiry*
Advisor: James D. Slotta
- 1998 **BFA**, Visual Arts, York University
Minored in English
- 1998 **BEd**, Education, York University
Qualified to teach Fine Arts and English, Grades 7-12 in Ontario
Qualified to teach all subjects, Grades 4-6 in Ontario

PROFESSIONAL EXPERIENCE

- 2025-
present **University of Michigan**, Ann Arbor, Michigan
Assistant Professor of Education Practice, Marsal Family School of Education
Faculty, Digital Studies Institute
Diversity Scholar, National Center for Institutional Diversity
Research Fellow, National AI Institute for Adult Learning and Online Education
- 2023-
present **University of Michigan**, Ann Arbor, Michigan
Director of Blended and Online Learning Design, Center for Academic Innovation
Adjunct Lecturer / Instructor of Record, Marsal Family School of Education
Co-lead, Rackham Learning Experience Design Graduate Certificate
Faculty, Digital Studies Institute
Diversity Scholar, National Center for Institutional Diversity
Research Fellow, National AI Institute for Adult Learning and Online Education
- 2021-2022 **University of Michigan**, Ann Arbor, Michigan
Associate Director, Learning Experience Design, Center for Academic Innovation
Adjunct Lecturer / Instructor of Record, Marsal Family School of Education
Co-lead, Rackham Learning Experience Design Graduate Certificate
Faculty, Digital Studies Institute
Diversity Scholar, National Center for Institutional Diversity
- 2019-2021 **University of Michigan**, Ann Arbor, Michigan
Learning Experience Design Lead, Center for Academic Innovation
Intermittent Lecturer, Marsal Family School of Education
Co-lead, Rackham Learning Experience Design Graduate Certificate
Faculty Affiliate, Digital Studies Institute
Diversity Scholar, National Center for Institutional Diversity

- 2018 **University of Michigan**, Ann Arbor, Michigan
Learning Experience Design Lead, Center for Academic Innovation
- 2016-2018 **University of Michigan**, Ann Arbor, Michigan
Learning Experience Designer Senior, Center for Academic Innovation
- 2005-2010 **The Yorkland School**, Toronto, Ontario
Classroom Teacher (all subjects), Grade 6
- 1998-2001 **The Yorkland School**, Toronto, Ontario
Visual Arts Teacher, Grades 9-12

HONORS AND AWARDS

- 2023 **Finalist, Provost Teaching Innovation Prize**, Center for Research on Learning and Teaching, University of Michigan. *Teaching in extended reality: Unleashing the potential of educational applications of augmented and virtual reality.*
- 2022 **Teaching Award**, Digital Studies Institute, University of Michigan
Research funding awarded (\$500.00)
- 2021 **Early Career Workshop Participant**, International Society of the Learning Sciences Annual Meeting
Funding to support participation in mentoring workshop with senior members of the Society
- 2020 **Digital Studies Research Grant**, Digital Studies Institute, University of Michigan
Funding to support research on use of digital technologies in educational contexts (\$2000.00)
- 2019 **Academic Innovation Fund**, Center for Academic Innovation, University of Michigan
Funding for proposed symposium: *Maxine Greene: Sounds and stories of lives lived in the pursuit of aesthetic social justice education.* Cancelled due to COVID-19.
- 2018 **Best Paper Award**
Visualizing course structures: Using course composition diagrams to reflect on design
Online Teaching and Learning SIG, American Educational Research Association (AERA)
- 2017 **Nomination for Best Design Paper**
The role of visual representations within the scientific practice of explanation
International Conference on Computer-supported Collaborative Learning (CSCL)
- 2015 **Doctoral Consortium Participant**, International Society of the Learning Sciences Annual Meeting
Funding to support participation in mentoring workshop with senior members of the Society
- 2013 **Doctoral Consortium Participant**, ACM Interaction Design and Children Conference
Funding to support participation in mentoring workshop with senior members of the community
- 2013-2016 **Ontario Graduate Scholarship**
Competitive, merit-based academic scholarship
Awarded in three consecutive years
- 2012 **Wilfred Rusk Wees Fellowship**

UNIVERSITY TEACHING EXPERIENCE

- 2021-present **University of Michigan**, Marsal Family School of Education, Educational Studies
Instructor of record and course creator, Winter semesters
EDUC 618: Educational Applications of Augmented and Virtual Reality
Approved course for the Extended Reality Graduate Certificate, Digital Studies Institute
Graduate level, one-credit
- Through a close examination of relevant literature and contemporary extended reality (XR) technology, students critically examine the potential for “breakthrough” technologies to support learning. Students will apply insight from current literature about learning theory, psychology, and human-computer interaction and their own direct experiences of XR to understand the ways in which these technologies might (or might not) support learning. **[Finalist, Provost’s Teaching Innovation Prize]**
- 2021 **University of Michigan**, Marsal Family School of Education, Educational Studies
Instructor of record and course creator, Spring semester
EDUC 617: Universal Design for Learning
Graduate level, two-credits
- Universal Design for Learning (UDL) is a learning design framework that accounts for learner variability and contextual factors through three principles: multiple means of engagement, multiple means of representation, and multiple means of action and expression. Students engage in analysis of teaching cases, collaborative knowledge construction, and rich discussion to apply UDL principles across a range of contexts. Students explore intersections of UDL with related pedagogies such as anti-racist pedagogies, culturally responsive teaching, and social-emotional learning.
- 2020 **University of Michigan**, Marsal Family School of Education, Educational Studies
Instructor of record, Winter semester
EDUC 626: Principles of Software Design for Learning
Graduate level, 3 credits
- Students explore significant educational problems, learner-centered design processes, ramifications of learning theories, and examples of learning technologies. Students begin a technology project by identifying an educational context, learning goals, and a learner audience to design software addressing the identified learner needs in the given context.
- 2019-present **University of Michigan**, Marsal Family School of Education, Educational Studies
Instructor of record and course creator, Fall (2019-2022), Winter (2020-2023)
EDUC 616: Learning Experience Design
Core course for the Learning Experience Design Graduate Certificate
Graduate level, 6 credits over two semesters
- Students explore foundational topics in design, theories of learning, and evidence-based approaches to instruction. In the seminar portion of the course, students discuss readings and projects with peers and instructors. In the residency portion of the course, students work alongside design mentors, media specialists, and faculty to create authentic and engaging learning experiences for a global audience of learners. This integrated experience culminates in the development of a learning design portfolio.
- 2019 **University of Michigan**, Marsal Family School of Education, Educational Studies
Instructor of record, Winter semester, Fall semester
EDUC 333: Video Games and Learning (undergraduate level)
EDUC 602: Video Games, Learning, and School Design (graduate level)

Meet-together format, 3 credits

Students take a close look at games within the context of education and learning by exploring recent work in gaming (video and board games), learning theory, motivation theory, curricula design, and other current work on the use and design of games for learning. Students integrate this reading and discussion in a range of activities, including poster presentations, papers and critiques, and game design projects to take a broad look at how learning and motivation theory can inform games, and how games can support learning.

2014

University of Toronto, School of Information

Instructor of record and course creator, Winter semester

KMDI 2002: Tangible and Embodied Interaction: Supporting New Forms of Personal and Social Interaction

Graduate level, 3 credits

The course is organized around five themes that are connected to the idea that tangible and embodied computing can support new forms of personal activity and social interaction: DIY and critical making; wearable computing and digital fashion; tangible, embodied, and immersive learning; smart objects, cars, and cities, and health and aging. Students participate in a series of “hands-on” and make site visits to relevant innovation labs. In addition, several local guest speakers are invited to present their work and to participate in whole group discussions around the central themes of the course.

OPEN ONLINE COURSE DEVELOPMENT AND TEACHING EXPERIENCE

2024-
present

University of Michigan, Coursera

Instructor and course creator, Center for Academic Innovation

Generative AI as a Learning Design Partner (three course series, online)

Students explore opportunities and applications for generative AI in supporting and enhancing learning design activities and tasks. Students learn how generative AI tools, like ChatGPT, can be used to create learning outcomes, draft course outlines, content, and assessments, and evaluate course design. Students determine the strengths and limitations of using generative AI in educational settings and develop strategies for engaging with educational stakeholders.

2022-
present

University of Michigan, Coursera

Instructor and course creator, Center for Academic Innovation

Introduction to Learning Experience Design (three course series, online)

Students are equipped with a broad knowledge of the field of learning experience design. This includes knowledge of key design activities, tools that learning experience designers (LXDs) use, and a look at the contemporary pedagogical, technological, and research information that designers need to stay current in the field. Students hear from professional learning designers, academic scholars, and leaders in the field who discuss contemporary issues and directions. Through these experiences, students begin to establish pathways and networks for your career. With the help of extended reality, students have a chance to experience authentic, immersive design scenarios and are tasked with creating and implementing their own course design.

2020-
present

University of Michigan, Coursera

Instructor and course creator, Center for Academic Innovation

Resilient Teaching Through Times of Crisis and Change (online)

Students apply guiding principles of resilient design for learning: designing for extensibility, designing for flexibility, and designing for redundancy. In this course, students identify key interactions that they want to facilitate and discuss ways technology and tools can be used to facilitate interactions in support of learning within fluctuating learning environments. Throughout the course, students draw inspiration from examples that highlight resilient teaching within changing educational settings.

PUBLICATIONS

Peer-reviewed Journal Articles

- 2023 Fortman, J., **Quintana R. M.**, & Aguinaga, J. (2023). Conceptions of time in educational technology: Considerations for equity-focused design. *Online Learning*, 27(4), 201-219. <https://doi.org/10.24059/olj.v27i4.4056>
- Quintana, R. M.** & Quintana, C. (2023). Situating MOOC learners within the field of learning experience design through immersion in authentic contexts. *Journal of Applied Instructional Design*. 12(3). <https://dx.doi.org/10.59668/515.12903>
- 2022 **Quintana, R. M.**, & Aguinaga, J. M. (2022). Scaffolding a culminating assignment within a community and task-based MOOC. *Online Learning*, 26(4), 31-58. <https://doi.org/10.24059/olj.v26i4.3476>
- Bressler, A., **Quintana, R. M.**, and Zint, M. (2022). Co-design of a massive open online course: An exploration of the motives and motive Fulfillment of a faculty member and student co-instructors. *Frontiers in Education*. 1-16. <https://doi.org/10.3389/educ.2022.1010018>
- 2021 Brooks, C., **Quintana, R. M.**, Choi, H., Quintana, C., NeCamp, T., & Gardner, J. (2021). Towards culturally relevant personalization at scale: Experiments with data science learners. *International Journal of Artificial Intelligence*. <https://doi.org/10.1007/s40593-021-00262-2>
- Chandler, C. B., **Quintana, R. M.**, Tan, Y. & Aguinaga, J. M. (2021). Realizing equity and inclusion goals in MOOCs. *Journal of Applied Instructional Design*, 10(4). https://edtechbooks.org/jaid_10_4/realizing_equity_and
- Ibrahim, N. I., Bohm, L., Roche, J. S., Stoddard, S. A., **Quintana, R. M.**, Vetter, J., Bennett, J., Costello, B., Carter, P. M., Cunningham, R., & Hashikawa, A. N. (2021). Creating a 'choose your topic' massive open online course: An innovative and flexible approach to delivering injury prevention education. *Medical Education Online*, (26)1, 1955646, DOI: 10.1080/10872981.2021.1955646
- Quintana, R. M.** & Pinto, J. D., Tan, Y. (2021). What we learned when we compared discussion posts from one MOOC hosted on two platforms. *Online Learning*, 25(4), 7-24. DOI: 10.24059/olj.v25i4.2897
- Quintana, R. M.** & Tan, Y. (2021). Visualizing course structure: Using course composition diagrams to reflect on design. *Tech Trends*, 65, 562-575, <https://doi.org/10.1007/s11528-021-00592-x>
- 2020 **Quintana, R. M.** & Quintana, C. (2020). When classroom interactions have to go online: The move to specifications grading in a project-based design course.

Pinto, J. D., Quintana, C., & **Quintana, R. M.** (2020). Exemplifying computational thinking scenarios in the age of COVID-19: Examining the pandemic's effects in a project-based MOOC. *Computing in Science and Engineering*, 22(6), 91-102. <https://doi.org/10.1109/MCSE.2020.30240121>

2019 **Quintana, R. M.**, & Tan, Y. (2019). Characterizing MOOC pedagogies: Exploring tools and methods for learning designers and researchers. *Online Learning Journal*, 23(4), 62-84. <http://dx.doi.org/10.24059/olj.v23i4.2084>

for

2015 **Cober, R.**, Tan, E., Slotta, J.D., So, H.-J., & Könings, K.D. (2015). Teachers as participatory designers: Two case studies with technology-enhanced learning environments. *Instructional Science*, 43(2), 203-228. <https://doi.org/10.1007/s11251-014-9339-0>

Book Chapters

2023 Lachheb, A., **Quintana, R. M.**, Yu, J. H., & Zamora, A. (2023). Diversity, equity, inclusion, and justice in action: A study of learning experience designers' practices. In Hokanson, B., Exter, M., Schmidt, M., & Tawfik, A. (editors). *Toward Inclusive Learning Design: Social Justice, Equity, and Community*. New York: Springer-Verlag.

2021 **Quintana, R. M.**, Fortman, J., & DeVaney, J. (2021). Advancing an approach of resilient design for learning by designing for extensibility, flexibility, and redundancy (Chapter 4). In C. González, T. Thurston, and K. Lundstrom (Eds.), *Resilient Pedagogy: Practical Teaching Strategies to Overcome Distance, Disruption, and Distraction* (pp. 77-92). Utah State University. <https://dx.doi.org/10.26079/a516-fb24>

2020 **Quintana, R. M.**, Hearn, C., Peurach, D. J., & Gabriele, K. (2020). Self-directed, community-supported learning in practice: A case of elevated support. In L. Wilton & C. Brett (Eds.), *Handbook on Research on Online Discussion-based Teaching Methods* (pp. 312-332). IGI Global. <http://www.igi-global.com/chapter/self-directedcommunity-supported-learning/254778?camid=4v1>

Quintana, R. M., Haley, S. R., Magyar, N., & Tan, Y. (2020). Learner and user experience design: A bidirectional approach. In M. Schmidt, A. Tawfik, Y. Earnshaw, & I. Jahnke (Eds.), *Learner and User Experience Research: An Introduction to the Field of Learning Design and Technology* (pp. 234-250). EdTechBooks. https://edtechbooks.org/ux/integrating_lxd_and_uxd

2018 Slotta, J. D., **Quintana, R. M.**, & Moher, T. (2018). Collective inquiry in communities of learners. In F. Fischer, C. E. Hmelo-Silver, S. R. Goldman, & P. Reimann (Eds.), *International Handbook of the Learning Sciences* (pp. 308-317). Routledge.

Papers in Peer-reviewed Conference Proceedings

2023 Zhou, X., Kok, C., **Quintana, R. M.**, Delahay, A., & Wang, X. (2023, July). How Learning experience designers make design decisions: The role of data, the reliance on subject matter expertise, and the opportunities for data-driven support. In *Proceedings of the Tenth ACM Conference on Learning@ Scale* (pp. 132-143).

- 2022 Aguinaga, J. M. & **Quintana, R. M.** (2022, June). Creating space for formative peer feedback in a community-oriented MOOC. In Chinn, C., Tan, E., Chan, C., & Kali, Y. (Eds.), (2022). *Proceedings of the 16th International Conference of the Learning Sciences (ICLS) 2022*, (pp. 2096-2097). Hiroshima, Japan: International Society of the Learning Sciences.
- Fortman, J. & **Quintana, R. M.** (2022, June). Emotion as a condition and target of learning design during emergency remote teaching. In Chinn, C., Tan, E., Chan, C., & Kali, Y. (Eds.), (2022). *Proceedings of the 16th International Conference of the Learning Sciences (ICLS) 2022*, (pp. 2152-2153). Hiroshima, Japan: International Society of the Learning Sciences.
- Quintana, R. M.** (2022, June). Charting learning experiences of immersion across digital space and time. In Chinn, C., Tan, E., Chan, C., & Kali, Y. (Eds.), (2022). *Proceedings of the 16th International Conference of the Learning Sciences (ICLS) 2022*, (pp. 1758-1760). Hiroshima, Japan: International Society of the Learning Sciences.
- 2021 **Quintana, R. M.** (2021). Examining effective design and pedagogical approaches in the context of massive open online courses. In A. Wichmann, H. U. Hoppe, & N. Rummel (Eds.), *General Proceedings of the 1st Annual Meeting of the International Society of the Learning Sciences (ISLS) 2021*, (pp. 95-96). Bochum, Germany: International Society of the Learning Sciences. **[Early Career Workshop participant]**
- Quintana, R. M.**, Liu, Y., Tan, Y. & Aguinaga, J. M. (2021). Promoting reflection in a community-oriented MOOC. In E. de Vries, Y. Hod, Y., J. Ahn (Eds.), *Proceedings of the 15th International Conference of the Learning Sciences (ICLS) 2021*, (pp. 1061-1062). Bochum, Germany: International Society of the Learning Sciences.
- 2020 **Quintana, R. M.** & Fortman, J. (2020). Exploring the experience of students who take on alternative viewpoints within a role-based simulation. In M. Gresalfi and I. S. Horn (Eds.), *The Interdisciplinarity of the Learning Sciences, Proceedings of the 14th International Conference of the Learning Sciences (ICLS) 2020*, Volume 1. (pp. 286-293). Nashville, Tennessee: International Society of the Learning Sciences. <https://repository.isls.org//handle/1/6649>
- Quintana, C., **Quintana, R. M.**, & Bricker, L. (2020). The pragmatics of board games in K-12 science classrooms. In Gresalfi, M. and Horn, I. S. (Eds.), *The Interdisciplinarity of the Learning Sciences, Proceedings of the 14th International Conference of the Learning Sciences (ICLS) 2020*, Volume 3. (pp. 1809-1810). Nashville, Tennessee: International Society of the Learning Sciences. <https://repository.isls.org//handle/1/6454>
- Quintana, R. M.**, Quintana, C., Fortman, J., & Gerber, E. R. (2020). ViewPoint: Student experiences with technology supporting role-based educational simulations. *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI)*, (pp. 1-7). Conference cancelled. <https://doi.org/10.1145/3334480.3383086>
- 2019 Tan, Y. & **Quintana, R. M.** (2019, March). What can we learn about learner interaction when one course is hosted on two MOOC platforms? *Proceedings of the 9th International Conference on Learning Analytics and Knowledge (LAK)*. (pp. 149-150). Tempe, Arizona.
- 2018 **Quintana, R. M.**, Brooks, C., Smothers, C., Tan, Y., Yao, Z., & Kulkarni, C. (2018). Mentor Academy: Engaging learners in the creation of data science problems for MOOCs. In J. Kay and R. Luckin (Eds.), *Rethinking Learning in the Digital Age*:

Making the Learning Sciences Count, Proceedings of the 13th International Conference of the Learning Sciences (ICLS) 2018, Volume 3. (pp. 1415-1416). London, UK: International Society of the Learning Sciences. <https://repository.isls.org/handle/1/654>

Quintana, R. M., Tan, Y., Gabriele, K., & Korf, N. (2018). It's just that visceral: Eliciting design insight using beaded representations of online course structure. *Proceedings of the 36th International Conference on Human Factors in Computing Systems: CHI 2018 Extended Abstracts (CHI)*. (LBW576, 6 pages). Montréal, Québec. <https://doi.org/10.1145/3170427.3188650>

2017 **Quintana, R. M.,** Haley, S. R., Levick, A., Holman, C., Hayward, B., & Wojan, M. (2017). The Persona Party: Using personas to design for learning at scale. *Proceedings of the 35th International Conference on Human Factors in Computing Systems: CHI 2017 Extended Abstracts (CHI)*. (pp. 933-941). Denver, Colorado. <https://doi.org/10.1145/3027063.3053355>

Quintana, R. M., Slotta, J. D., & Moher., T. (2017). The role of visual representations within the scientific practice of explanation. In B.K. Smith, M. Borge, E. Mercier, and K. Y. Lim (Eds.), *Making a Difference: Prioritizing Equity and Access in CSCL, Proceedings of the 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, Volume 1.* (pp. 503-510). Philadelphia, Pennsylvania: International Society of the Learning Sciences. <https://repository.isls.org/handle/1/271> **[Best Design Paper nominee]**

2016 Hod, Y., Charles, E. S., Acosta, A., Ben-Zvi, D., Chen, M. H., Choi, K., Dugdale, M., Kali, Y., Lenton, K., McDonald, S. P., Moher, T., **Quintana, R. M.,** Rook, M. M., Slotta, J. D., Tietjen, P., Weiss, P. L., Whittaker, C., Zhang, J., Bielaczyc, K., & Kapur, M. (2016). Future learning spaces for learning communities: New directions and conceptual frameworks. In C. K. Looi, J. L. Polman, U. Cress, and P. Reimann (Eds.), *Transforming Learning, Empowering Learners, Proceedings of the 12th International Conference of the Learning Sciences (ICLS) 2016, Volume 2.* (p. 1063-1070). Singapore: International Society of the Learning Sciences. <https://repository.isls.org/handle/1/374>

Quintana, R. M., Quintana, C., Madeira, C., & Slotta, J. D. (2016, May). Keeping watch: Exploring wearable technology designs for K-12 teachers. *Proceedings of the 34th International Conference on Human Factors in Computing Systems: CHI 2016 Late-Breaking Work (CHI)*. (pp. 2272-2278). May 9-12. San Jose, California.

2015 **Cober, R.** (2015). The role of student-generated visual representations in collective inquiry. In O. Lindwall, P. Häkkinen, T. Koschman, P. Tchounikine, and S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning, Proceedings of the 11th International Conference on Computer Supported Collaborative Learning (CSCL) 2015.* (pp. 955-956). Gothenburg, Sweden: International Society of the Learning Sciences. **[Doctoral Consortium participant]**

Cober, R., Acosta, A., Lui, M., Moher, T., Kuhn, A., Quintana, C., & Slotta, J. D. (2015). The use of visual evidence for planning and argumentation. In O. Lindwall, P. Häkkinen, T. Koschman, P. Tchounikine, and S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning, Proceedings of the 11th International Conference on Computer Supported Collaborative Learning (CSCL) 2015.* Volume 2. (pp. 39-46). Gothenburg, Sweden: The International Society of the Learning Sciences. <https://repository.isls.org/handle/1/463>

Fong, C., **Cober, R.,** Messina, R., Moher, T., Murray, J., Peebles, B., & Slotta, J. D. (2015). The 3R orchestration cycle: Fostering multi-modal inquiry discourse in a scaffolded inquiry environment. In O. Lindwall, P. Häkkinen, T. Koschman, P. Tchounikine,

and S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning, Proceedings of the 11th International Conference on Computer Supported Collaborative Learning (CSCL) 2015*. Volume 1. (pp. 548-551). Gothenburg, Sweden: The International Society of the Learning Sciences. <https://repository.isls.org/handle/1/388>

Mercier, E., Fong, C., **Cober, R.**, Slotta, J. D., Forssell, K. S., Israel, M., Joyce-Gibbons, A., Martinez-Maldonado, R., Messina, R., Murray, J., Peebles, B., Moher, T., Shehab, S., & Rummel, N. (2015). Researching and designing for the orchestration of learning in the CSCL classroom. In O. Lindwall, P. Häkkinen, T. Koschman, P. Tchounikine, and S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning, Proceedings of the 11th International Conference on Computer Supported Collaborative Learning (CSCL) 2015*. Volume 2. (pp. 599-606). Gothenburg, Sweden: The International Society of the Learning Sciences. <https://repository.isls.org/handle/1/445>

Moher, M., Slotta, J. D., Acosta, A., **Cober, R.**, Dasgupta, C., Fong, C., Gnoli, A., Silva, A., Lopez Silva, B., Perritano, A., & Peppler, K. (2015). Knowledge construction in the instrumented classroom: Supporting student investigations of their physical learning environment. In O. Lindwall, P. Häkkinen, T. Koschman, P. Tchounikine, and S. Ludvigsen (Eds.), *Exploring the Material Conditions of Learning, Proceedings of the 11th International Conference on Computer Supported Collaborative Learning (CSCL) 2015*. Volume 2. (pp. 631-638). Gothenburg, Sweden: The International Society of the Learning Sciences. <https://repository.isls.org/handle/1/449>

2014 Moher, T., Ching, C. C., Schaefer, S., Lee, V. R., Enyedy, N., Danish, J. A., Guerra, P., Gnoli, A., Pazmino, P. J., Silva, B. A., Lyons, L., Perritano, A., Slattery, B., Tissenbaum, M., Slotta, J. D., **Cober, R.**, Fong, C., & Rubin, A. (2014). Becoming reflective: Designing for reflection on physical performances. In J. L. Polman, E. A. Kyza, D. K. O'Neill, I. Tabak, W. R. Penuel, A. S. Jurow, K. O'Connor, T. Lee, and L. D'Amico (Eds.), *Learning and Becoming in Practice, Proceedings of the 11th International Conference of the Learning Sciences (ICLS) 2014*. Volume 3. (pp. 1273-1282). Boulder, Colorado: International Society of the Learning Sciences. <https://repository.isls.org/handle/1/970>

2013 **Cober, R.** (2013). An embodied approach to collaborative knowledge construction for science inquiry. *Proceedings of the 12th International Conference on Interaction Design and Children (IDC)*. (pp. 667-670). New York, New York. **[Doctoral Consortium participant]**

Cober, R., McCann, C., Moher, T., & Slotta, J. D. (2013). Aggregating students' observations in support of community knowledge and discourse. In N. Rummel, M. Kapur, M. J. Nathan, & S. Puntambekar (Eds.), *To See the World and a Grain of Sand: Learning across Levels of Space, Time, and Scale, Proceedings of the 10th Annual Conference on Computer Supported Collaborative Learning (CSCL)*. Volume 1. (pp. 121-128). Madison, Wisconsin: The International Society of the Learning Sciences. <https://repository.isls.org/handle/1/1776>

Fong, C., **Cober, R.**, Madeira, C. A., Messina, R., Murray, J., Peebles, B., & Slotta, J. D. (2013). Common Knowledge: Orchestrating synchronously blended F2F discourse in the elementary classroom. In N. Rummel, M. Kapur, M. J. Nathan, & S. Puntambekar (Eds.), *To See the World and a Grain of Sand: Learning across Levels of Space, Time, and Scale, Proceedings of the 10th Annual Conference on Computer Supported Collaborative Learning (CSCL)*. Volume 2. (pp. 26-29). Madison, Wisconsin: The International Society of the Learning Sciences. <https://repository.isls.org/handle/1/1845>

- 2012 **Cober, R.**, Au, O. & Son, J., (2012, February). Using a participatory approach to design a technology-enhanced museum tour for visitors who are blind. In Proceedings of the iConference 2012 (pp. 592-594). Toronto, Ontario. <https://doi.org/10.1145/2132176.2132301>
- Cober, R.**, Fong, C., Gnoli, A., Silva, B. L., Lui, M., Madeira, C. A., McCann, C., Moher, T., Slotta, J. D., & Tissenbaum, M. (2012). Embedded Phenomena for knowledge communities: Supporting complex practices and interactions within a community of inquiry in the elementary science classroom. In J. van Aalst, K. Thompson, M. J. Jacobson, and P. Reimann (Eds.), *The Future of Learning, Proceedings of the 10th International Conference of the Learning Sciences (ICLS) 2012*. Volume 2. (pp. 64-71). Sydney, NSW, Australia: International Society of the Learning Sciences. <https://repository.isls.org//handle/1/2385>

Conference Presentations

Unpublished, peer-reviewed papers

- 2024 Aguinaga, J., **Quintana, R. M.**, & Quintana, C. (2024, April). Creating authentic professional learning opportunities for graduate students studying learning experience design. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 11-14. Philadelphia, Pennsylvania.
- Najafi, H. & **Quintana, R. M.** (2024, April). Extended reality at scale: Designing immersive environments for global learning. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 11-14. Philadelphia, Pennsylvania.
- Quintana, R. M.** & Canosa, E. (2024, April). Examining diversity, equity, inclusion, and belonging in extended reality experiences for online learning. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 11-14. Philadelphia, Pennsylvania.
- 2023 **Quintana, R. M.**, Fortman, J., & Cradit, N. (2023, April). Dimensions of space and time in a massive open online course platform: Considerations for equity-focused design. Presented in the Critically Examining Space and Time in Learning and Design for More Just and Equitable Futures structured poster session at the Annual Meeting of the American Educational Research Association (AERA). April 13-16. Chicago, Illinois.
- 2022 **Quintana, R. M.** & Fortman, J., & Oldenburg-McGee, C. (2022, October). Pedagogical designs for extended reality environments: Supporting immersive learning and equitable access. Poster presented at the Annual Meeting of the Association for Educational Communications and Technology (AECT). October 24-28. Las Vegas, Nevada.
- Quintana, R. M.** & Aguinaga, J. M. (2022, April). A rich landscape for learning: Scaffolding a culminating assignment within a community and task-based MOOC. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 22-25. San Diego, California.
- Quintana, R. M.** & Fortman, J., & Oldenburg-McGee, C. (2022, April). Dwelling in and stepping out: Reflecting on pedagogical designs to support learning in XR environments. Poster presented at the Annual Meeting of the American Educational Research Association (AERA). April 22-25. San Diego, California.
- 2021 Chandler, C. B., **Quintana, R. M.**, Fortman, J., & Tan, Y. (2021, April). Playing the case: A self-study of the implementation of an online, asynchronous professional

learning experience design simulation. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 9-12. Online.

Fortman, J., **Quintana, R. M.**, Chandler, C. B., & Tan, Y. (2021, April). Becoming a professional learning designer: Modeling concept relations in a playable case study. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 9-12. Online.

Pinto, J. D., Quintana, C., & **Quintana, R. M.** (2021, April). Exploring how learners integrate personally meaningful issues in a project-based MOOC. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 9-12. Online.

Quintana, R. M., Pinto, J. D., Tan, Y. (2021, April). What we learned when we compared discussion posts from one MOOC hosted on two platforms. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 9-12. Online.

2020

Chandler, C. B., **Quintana, R. M.**, Tan, Y., & Yang., N. (2020, April). Diversity, equity, and inclusion in MOOCs: Mapping goals from proposal to design. Paper accepted to the Annual Meeting of the American Educational Research Association (AERA). Conference cancelled.

Quintana, R. M., Tan, Y. Haley, S. R., Wing, L. & Sohn, J. (2020, April). Developing a MOOC series: Pedagogical considerations for learning designers. Paper accepted to the Annual Meeting of the American Educational Research Association (AERA). Conference cancelled.

Tan, Y., **Quintana, R. M.**, & Sohn, J. (2020, April). Cross-platform engagement in MOOCs: Understanding learner audiences on two course delivery platforms. Poster accepted to the Annual Meeting of the American Educational Research Association (AERA). Conference Cancelled.

2019

Bressler, A., **Quintana, R. M.**, & Zint, M. (2019, April). By learners, for learners: Reviewing a MOOC on climate change co-designed by students and faculty. Presented in the Innovating MOOC Pedagogies structured poster session at the Annual Meeting of the American Educational Research Association (AERA). April 5-8. Toronto, Ontario.

Bricker, L., Allen, D., Quintana, C., Jackson, A., & **Quintana, R. M.** (2019, March-April). The new science: Images of science in a commercially available science-themed board game. Paper presented at the 2019 Annual International Conference of the National Association for Research on Science Teaching (NARST). March 31-April 3. Baltimore, Maryland.

Quintana, C., Stockdill, D., **Quintana, R. M.**, & Bennett, J. (2019, April). Exploring the integration of project-based learning approaches into MOOCs. Presented in the Innovating MOOC Pedagogies structured poster session at the Annual Meeting of the American Educational Research Association (AERA). April 5-8. Toronto, Ontario.

Quintana, R. M. (2019, April). The Knowledge Community and Inquiry model for supporting emergent curriculum designs. Presented in the Knowledge Community and Inquiry model: Synthesizing a Decade's Research for a Widening Audience structured poster session at the Annual Meeting of the American Educational Research Association (AERA). April 5-8. Toronto, Ontario.

- Quintana, R. M.**, Brooks, C., Smothers, C., & Tan, Y. (2019, April). Engaging MOOC learners in the creation of data science problems. Presented in the Innovating MOOC Pedagogies structured poster session at the Annual Meeting of the American Educational Research Association (AERA). April 5-8. Toronto, Ontario.
- Quintana, R. M.** & Tan, Y. (2019, April). Characterizing MOOC pedagogies: Exploring new tools and methods for learning designers and researchers. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 5-8. Toronto, Ontario.
- 2018 **Quintana, R. M.**, Tan, Y., & Korf, N. (2018, April). Visualizing course structure: Using course composition diagrams to reflect on design. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 13-17. New York, New York. **[best paper, Online Teaching and Learning SIG]**
- 2017 **Quintana, R. M.** & Slotta, J. D. (2017, April). Visual timelines: A proposed approach to transcription for researchers using design-based research methods. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 27-May 1. San Antonio, Texas.
- Slotta, J. D., Lui, M., **Quintana, R. M.**, & Moher, T. (2017, April). Modeling Wallcology: Technology scaffolds for building, predicting, and reasoning around models of simulated ecosystems. Poster presented at the Annual Meeting of the American Educational Research Association (AERA). April 27-May 1. San Antonio, Texas.
- 2016 Madeira, C.A., **Quintana, R. M.**, & Slotta, J. D. (2016, April). Wearable technology for teachers: Support for classroom orchestration. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 8-11. Washington, D.C.
- Quintana, R. M.**, Madeira, C. A. & Slotta, J. D. (2016, April). Collecting and creating visual representations within a technology-mediated astronomy curriculum. Poster presented at the Annual Meeting of the American Educational Research Association (AERA). April 8-11. Washington, D.C.
- 2015 **Cober, R.**, Moher, T. & Slotta, J. D. (2015, April). Working as a scientific community: Collecting and sharing evidence from camera trap photos of our schoolyard. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 16-20. Chicago, Illinois.
- Cober, R.**, Tan, E., Slotta, J. D., So, H.-J., Könings, K. D. (2015, April). Conditions that support teachers as participatory designers: Two case studies of technology design for knowledge-building environments. Poster presented at Annual Meeting of the American Educational Research Association (AERA). April 16-20. Chicago, Illinois.
- 2014 **Cober, R.**, Acosta, A., Fong, C., Peebles, B., & Slotta, J. D. (2014, April). Getting a feel for it: A hands-on approach for expressive activities in middle school astronomy. Round table presentation at the Annual Meeting of the American Educational Research Association (AERA). April 3-7. Philadelphia, Pennsylvania.
- Fong, C., **Cober, R.**, Murray, J., Peebles, B., & Slotta, J.D. (2014, April). Common Knowledge: Design, scripting, and orchestration of knowledge building discourse in elementary science. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 3-7. Philadelphia, Pennsylvania.

Oztok, M., Zingaro, D., **Cober, R.**, Brett, C., & Hewitt, J. (2014, April). Toward understanding threads as social and cognitive artifacts for knowledge building in online learning. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 3-7. Philadelphia, Pennsylvania.

tech2013

Cober, R., McCann, C., Moher, T. & Slotta, J. D. (2013, April). Aggregate representations to support scientific inquiry: A case study with Embedded Phenomena. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 27- May 1. San Francisco, California.

Cober, R., McCann, C., Moher, T. & Slotta, J. D. (2013, April). Structured multi-vocal representations in collective inquiry: Scaffolding the construction of relationship networks from binary observations. Poster presented at the Embedded Phenomena for Inquiry Communities symposium at the Annual Meeting of the American Educational Research Association (AERA). April 27- May 1. San Francisco, California.

Fong, C., **Cober, R.**, Madeira, C., & Slotta, J. D. (2013, April). Common Knowledge for collective inquiry discourse. Poster presented at the Annual Meeting of the American Educational Research Association (AERA). April 27- May 1. San Francisco, California.

Slotta, J. D., & **Cober, R.** (2013, August). Smart classrooms for knowledge communities: Scaffolding complex inquiry designs. Paper presented at the biennial conference of the European Association for Learning and Instruction (EARLI). August 27-31. Munich, Germany.

Tissenbaum, M., Zukowski, M., **Cober, R.**, Acosta, A., & Slotta, J. D. (2013, February). Rock, paper, awesome. Student design challenge demonstration at the 7th International Conference on Tangible, Embedded and Embodied Interaction. (TEI). February 10-13. Barcelona, Spain.

2012

Cober, R. & Slotta, J. D. (2012, May). Using aggregated representations of student-contributed content in an inquiry-based science curriculum: A case study. Paper presented at the Annual Meeting of the Canadian Society for Studies in Education (CSSE). May 27-30. Waterloo, Ontario.

Fong, C., **Cober, R.**, Madeira, C. A., & Slotta, J. D. (2012, April). Common Knowledge: Scaffolding collective inquiry for knowledge communities. Paper presented at the Annual Meeting of the American Educational Research Association (AERA). April 13-17. Vancouver, British Columbia.

Workshop Development

Development and facilitation of conference workshops

2020

Quintana, R. M. & Gerber, E. R. (2020, June). Exploring ViewPoint: A new pedagogical tool for engaging learners in role-based simulations. Workshop co-organizer at ICLS 2020: The International Conference for the Learning Sciences.

2018

Quintana, C., **Quintana, R. M.**, Bricker, L. A., Jackson, A., & Allen, D. (2018, June). Rethinking learning in the digital age: Exploring the potential for using science-themed board games in science classrooms. Workshop co-organizer at ICLS 2018: The International Conference for the Learning Sciences.

Workshop Participation

Unpublished papers and posters

- 2018 Shultz, K., Tan, Y., & **Quintana, R. M.** (2018, May). What can we learn from historic MOOC data? Perspectives from two learning designers and a data scientist. Poster presented at the Michigan Institute for Data Science (MIDAS) Learning Analytics Symposium. University of Michigan. Ann Arbor, Michigan.
- 2017 Brooks, C., **Quintana, R. M.**, & Liang, H. (2017, March). Engaging MOOC learners as lifelong collaborators. Paper presented at the Workshop on Integrated Learning Analytics of MOOCs Post-Course Development at the 7th International Learning Analytics & Knowledge Conference (LAK). March 13-17. Vancouver, British Columbia.
- 2015 **Cober, R.** & Slotta, J. D. (2015, April). The role of student-generated visual representations in collective inquiry. Participation in the Deep Multimodal Data Jam workshop held by the NSF-supported Learning Games Play Data Consortium and the NSF-supported Analytics for Learning project. April 15. Chicago, Illinois.
- 2013 **Cober, R.** (2013, June). Supporting collaborative inquiry through aggregate representations of student-generated content. Paper presented at the Human-Computer Interaction and the Learning Sciences workshop at the 10th International Conference on Computer-supported Collaborative Learning (CSCL). June 15-19. Madison, Wisconsin.
- 2012 **Cober, R.**, Madeira, C., Fong, C. & Slotta, J.D. (2012, July). Designing smart classroom technologies with teachers: Creating opportunities for collaboration and innovation. Paper presented at the Teachers as Designers of Technology Enhanced Learning Materials workshop at the 10th International Conference for the Learning Sciences (ICLS). July 2-6. Sydney, Australia.
- Lui, M., **Cober, R.** & Slotta, J.D. (2012, May). Designing learning experiences for collective inquiry: Two case studies of interaction patterns. Paper presented at the Educational Interfaces, Software, and Technology workshop at the 30th International Conference on Human Factors in Computing Systems (CHI). May 5-10. Austin, Texas.
- Slotta, J. D., Tissenbaum, M., Lui, M., Fong, C. & **Cober, R.** (2012, July). Designing and orchestrating complex collective inquiry: A role for symbolic representation and technology environments. Paper presented at the Classroom Orchestration: Moving Beyond Current Understanding of the Field workshop at the 10th International Conference for the Learning Sciences (ICLS). July 2-6. Sydney, Australia.

Columns and Guest Blog Posts

- 2021 Lachheb, A. & **Quintana, R. M.** (2021, August 18). Learning experience design at the Center for Academic Innovation: A DEIJ Story. <https://ai.umich.edu/blog/learning-experience-design-at-the-center-for-academic-innovation-a-deij-story/>
- Quintana, R. M.** (2021, July 5). Resilient teaching: A learning design framework for a post-pandemic era. Media and Learning. <https://media-and-learning.eu/type/featured-articles/resilient-teaching-a-learning-design-framework-for-a-post-pandemic-era/>
- 2020 **Quintana, R. M.** & DeVaney, J. (2020, May 27). Laying the foundation for a resilient teaching community. Inside Higher Education.

<https://www.insidehighered.com/blogs/learning-innovation/laying-foundation-resilient-teaching-community>

DeVaney, J., & **Quintana, R. M.** (2020, April 15). Preparing for future disruption: Hybrid teaching for a new instructional age. Inside Higher Education. <https://www.insidehighered.com/blogs/learning-innovation/preparing-future-disruption-hybrid-resilient-teaching-new-instructional>

2019

Arashiro, P., **Quintana, R. M.**, & Tan, Y. (2019, September 28). Summer MOOOOC adventure: Grazing courses on FutureLearn. Center for Academic Innovation. <https://ai.umich.edu/blog/summer-moooooc-adventure-grazing-courses-on-futurelearn/>

Chandler, C. B., **Quintana, R. M.**, Tan, Y., & Yang, N. (2019, October 31). Diversity, equity, and inclusion in MOOCs: Mapping goals from proposal to design. Center for Academic Innovation. <https://ai.umich.edu/blog/diversity-equity-and-inclusion-in-moocs-mapping-goals-from-proposal-to-design/>

Haley, S., Magyar, N., **Quintana, R. M.**, & Tan, Y. (2019, November 22). How learning experience design informs user experience design at Academic Innovation. Center for Academic Innovation. <https://ai.umich.edu/blog/how-learning-experience-design-informs-user-experience-design-at-academic-innovation/>

Park, J. & **Quintana, R. M.**, Tan, Y., Yan, W. (2019, January 21). Gallery Tool unlocks peer feedback possibilities for MOOC learners. Center for Academic Innovation. <https://ai.umich.edu/blog/gallery-tool-unlocks-peer-feedback-possibilities-for-mooc-learners/>

Quintana, R. M., Tan, Y., LaFosse, R., & Bennett, J. (2019, April 21). Presenting our research at the 2019 AERA Annual Meeting. Center for Academic Innovation. <https://ai.umich.edu/blog/presenting-our-research-at-the-2019-aera-annual-meeting/>

Quintana, R. M., Tan, Y., Yan, W. (2019, March 22). Recapping the 2019 Learning Analytics and Knowledge Conference. Center for Academic Innovation. <https://ai.umich.edu/blog/recapping-the-2019-learning-analytics-knowledge-conference/>

Tan, Y., **Quintana, R. M.**, Haley, S., & Magyar, N. (2019, October 24). Evolving the learner persona creation process at Academic Innovation. Center for Academic Innovation. <https://ai.umich.edu/blog/evolving-the-learner-persona-creation-process-at-academic-innovation/>

2018

Brooks, C. & **Quintana, R. M.** (2018, January 11). A mentor academy. Center for Academic Innovation. <http://ai.umich.edu/blog/a-mentor-academy/>

Quintana, R. M. (2018, March 15). Seeing the "big picture": Using design representations to promote understanding and reflection on design. Center for Academic Innovation. <https://ai.umich.edu/blog/seeing-the-big-picture-using-design-representations-to-promote-understanding-and-reflection-on-design/>

Quintana, R. M. (2018, February 23). Using chart paper and sticky notes to bring curriculum design into focus. Center for Academic Innovation. <http://ai.umich.edu/blog/using-chart-paper-and-sticky-notes-to-bring-curriculum-design-into-focus/>

Quintana, R. M., Tan, Y., & Schulz, K. (2018, June 21). What we can learn from historic MOOC Data: Findings from our participation in the AIM analytics dropout

prediction challenge. Center for Academic Innovation.
<http://ai.umich.edu/blog/what-we-can-learn-from-historic-mooc-data-findings-from-our-participation-in-the-aim-analytics-dropout-prediction-challenge/>

- 2017 **Quintana, R. M.** & Tan, Y. (2017, December 20). Introducing the 'All Hands-on Deck' writing jam. Center for Academic Innovation.
<http://ai.umich.edu/blog/introducing-the-all-hands-on-deck-writing-jam-for-visual-descriptions-of-images/>
- Quintana, R. M.** (2017, July 13). Transforming university students from consumers to developers of online content. Center for Academic Innovation.
<http://ai.umich.edu/blog/transforming-university-students-from-consumers-to-developers-of-online-content-2/>

SCHOLARLY AND INVITED PRESENTATIONS

Scholarly Presentations

- 2023 **Quintana, R. M.** & Quintana, C. (2023, July). Educating Learning Experience Designers: A Pathway from "Learning About" to "Learning to Be". [Keynote]. Summer Research Symposium. Association for Educational Communications and Technology. [Virtual].
- Quintana, R. M.** (2023, May). The Power of Design and Innovation for Gameful and Immersive Teaching and Learning. [Keynote]. Symposium on Gameful and Immersive Learning. Rensselaer Polytechnic Institute. Albany, NY.
- 2022 **Quintana, R. M.** (2022, April). Integrating UX and LXD: A Bidirectional Approach. [Keynote] UX @ UM conference. University of Michigan, Ann Arbor, Michigan.
- 2021 Lachheb, A., **Quintana, R. M.**, Yu, J. H., & Zamora, A. (2021, July). Diversity, equity, inclusion, and justice in action: A case study of learning experience designers' practice for online learning experiences. 2021 AECT Summer Research Symposium: Toward Inclusive Learning Design: Social Justice, Equity, and Community. Online.
- Quintana, R. M.** & Aguinaga, J. M. (2021, May). Fostering reflection on practice within MOOCs. Pandemic Pedagogy Research Symposium. Online.
- 2020 Tan, Y. & **Quintana, R. M.** (2020, February). A tale of two MOOCs: What we learned when we hosted one course on two platforms. Academic Innovation Data Showcase. University of Michigan, Ann Arbor, Michigan.
- Quintana, R. M.** & Wing, L. (2020, June). Developing a MOOC series: Pedagogical considerations for learning designers. Online Learning Consortium. Online.
- 2019 **Quintana, R. M.** (2019, January). Using data to visualize MOOC design and pedagogy. Academic Innovation Data Showcase. University of Michigan, Ann Arbor, Michigan.
- 2018 **Quintana, R. M.** (2018, June). Visualizing curriculum design of online courses: Exploring the impacts of digital and tangible representations. Outside-In Series. Center for Academic Innovation. University of Michigan, Ann Arbor, Michigan.
- 2017 **Quintana, R. M.** (2017, September). Visualizing course structure: Just bead it! Academic Innovation at Michigan (AIM) Analytics Workshop Series. Center for Academic Innovation. University of Michigan, Ann Arbor, Michigan.

- 2013 **Cober, R.** (2013, March). Aggregate representations to support scientific inquiry: A case study. The 13th Annual Dean's Graduate Student Research Conference. Ontario Institute for Studies in Education. Toronto, Ontario.
- 2012 **Cober, R.** (2012, March). The role of paper-based artifacts in a technology-rich classroom. The 12th Annual Dean's Graduate Student Research Conference. Ontario Institute for Studies in Education. Toronto, Ontario.

Invited Presentations

- 2024 Brooks, C., Pasek, J. & **Quintana, R. M.** (2024, October). Building AI Professional Skills to Meet Emerging Workforce Needs [Panel]. Innovation Summit: XR, Generative AI, and the Future of Experiential Technologies. University of Michigan. Ann Arbor, MI.
- Quintana, R. M.**, Boyes, A., & Straub, E. O. (2024, March). Shaping change: Evolving processes in response to emerging design opportunities. [Presentation]. Digital Learning Summit. Stanford University. Palo Alto, CA.
- 2023 **Quintana, R. M.** & Saca, P. (2023, April). Designing Inclusive Extended Reality (XR) Experiences. [Presentation]. Team event. University of Maryland Global Campus. Online.
- Quintana, R. M.** (2023, March). Designing XR-enhanced Online Learning Experiences: Challenges and Opportunities. [Presentation]. Digital Learning Summit. Notre Dame. South Bend, IN.
- 2022 Barnes, S., Coles, C., Kumar, V., **Quintana, R. M.** & Toney, T. (2022, May). How can technology support teaching innovation? ["Flipped" Workshop]. Times Higher Education Digital Universities Week, US. Cambridge, MA.
- 2021 **Quintana, R. M.** & Lindgren, R. (2021, September). Social learning in augmented and virtual reality. [Presentation]. Academic Innovation at Michigan (AIM) Extended Reality (XR). Online.
- Quintana, R. M.** & Peurach, D. (2021, June). From content to community: An emerging learning design framework for re-creating learning experiences for a digital world. [Presentation]. Michigan Online Visionary Educators series. Michigan Online. Online.
- Quintana, R. M.** (2021, May). Resilient teaching: A learning design framework for a post-pandemic era. [Presentation]. Media and Learning Online: Spring 2021 conference. Online.
- Quintana, R. M.** (2021, April). Digital Studies and Humanities. [Panel]. XR @ Michigan Summit. Online.
- 2020 **Quintana, R. M.** (2020, December). Building resilient teaching through times of change. [Keynote]. Coursera Bold and Innovative Educators series. Online.
- Quintana, R. M.** (2020, November). Building resilient teaching models after Covid-19: The business schools case. [Panel]. Annual Bachelor's Programme Conference. Online.

Quintana, R. M. (2020, October). Building resilient teaching models after Covid-19. [Keynote]. Association to Advance Collegiate Schools of Business Conference. Online.

Quintana, R. M. (2020, June). Resilient teaching through times of crisis and change. [Panel]. Learning Environments in the time of COVID-19: (Towards) Evidence-Driven Innovation and Resilience at the University of Michigan. Michigan Institute for Data Science (MIDAS). University of Michigan. Online.

2019 **Quintana, R. M.** (2019, April). Online learning experiences. [Presentation]. Michigan China Forum: Education Panel. University of Michigan, Ann Arbor, Michigan.

ADDITIONAL UNIVERSITY RESEARCH EXPERIENCE

2011-2016 **Ontario Institute for Studies in Education**, University of Toronto, Toronto, Ontario
Research Assistant, Encore Lab, with Dr. James D. Slotta

- Embedded Phenomena Project
- Collective inquiry and digital simulation for K-12 science

2016 **Glendon College**, York University, Toronto, Ontario
Research Associate, with David Ip Yam

- First Year Experience Course
- Curriculum development and learning experience design

2016 **Western University**, London, Ontario
Research Assistant, with Dr. Mi Song Kim

- Social Science and Humanities Research Council, Knowledge Synthesis Grant
- Community-oriented approaches to teaching and learning

2013 **University of California, Berkeley**, Berkeley, California
Research Assistant, with Dr. Lisa Butler

- Community Health Worker Assistive Technology project
- Curriculum resources for health workers in developing nations

2013 **Ontario Institute for Studies in Education**, University of Toronto, Toronto, Ontario
Research Assistant, with Dr. Jim Hewitt

- The Pepper Project
- Social learning through online education platform

2012 **Ontario Institute for Studies in Education**, University of Toronto, Toronto, Ontario
Research Assistant, with Dr. Monique Herbert

- Ontario Educational Research Bank project
- Curriculum resource portal for Ontario Ministry of Education

SERVICE TO THE PROFESSION

Program Chair

2022-2025 Program chair for the Online Teaching and Learning SIG, American Educational Research Association, elected to three-year term

Guest Editor for Journals

- 2024 Alexandrou, A., Rice, M., & **Quintana, R. M.** (*forthcoming*). Applying critically complex theories to professional learning with and about advanced technologies. *Professional Development in Education*.
- 2023 Fortman, J., & **Quintana, R. M.** (2023). Fostering collaborative and embodied learning with extended reality: Special issue introduction. *International Journal of Computer-Supported Collaborative Learning*, 1-8.
- 2022 Lachheb, A., **Quintana, R. M.**, Quintana, C., & Fortman, J. (2022) Rethinking multimedia design for learning: An introduction to the special issue. *Journal of Applied Instructional Design*, 11(4).

Peer Reviewer for Journals

- 2024 Professional Development in Education (PDIE)
- 2018-2023 Online Learning Journal (OLJ)
- 2021 The Journal of Applied Instructional Design (JAID)
- 2020 Currents in Teaching and Learning (CTL)
- 2019 The International Review of Research in Open and Distributed Learning (IRRODL)
- 2018 Teaching and Teacher Education (TTE)

Peer Reviewer for Conferences

- 2017-2024 American Educational Research Association (AERA)
- 2012-2014 Canadian Society for Studies in Education (CSSE)
- 2013-2015 Computer-supported Collaborative Learning (CSCL)
- 2019-2022 Human Factors in Computing Systems (CHI)
- 2013-2016 Interaction Design and Children (IDC)
- 2014-2023 International Conference of the Learning Sciences (ICLS)
- 2019 Learning Analytics and Knowledge (LAK)
- 2015 Tangible, Embedded, Embodied Interaction (TEI)

Conference Organization

- 2025 Digital Learning Summit, University of Michigan, Program Committee Chair
- 2024 Digital Learning Summit, Stanford University, Member of Steering Committee
- 2023 American Educational Research Association (AERA): Co-organizer for the “Critically Examining Space and Time in Learning and Design for More Just and Equitable Futures” structured poster session, Advanced Technologies for Learning SIG
- 2022 International Conference of the Learning Sciences (ICLS): Co-organizer for the “Where, when, and at what pace? Space and time in equitable learning design” symposium

American Educational Research Association (AERA): Co-organizer for the “Technologies for situated, grounded, embodied learning: The unique role of extended reality experiences” structured poster session, Advanced Technologies for Learning SIG

2019 American Educational Research Association (AERA): Co-organizer for the Innovating MOOC Pedagogies Structured Poster Session, Online Teaching and Learning SIG

2019-2020 Human Factors in Computing Systems (CHI): Associate Paper Chair for Learning, Education, and Families Subcommittee

Conference Session Chair

2021 American Educational Research Association (AERA): Discussing Online Discussions

2019 Human Factors in Computing Systems (CHI): Online Learning Contexts

2018 Human Factors in Computing Systems (CHI): Accessible Images and Photographs

External Advisory Board Member

2020-2023 NSF-funded Careers in Play Project

Peer Reviewer for Grant Proposals

2022 National Science Foundation: Research on Emerging Technologies for Teaching and Learning

2021-2022 Spencer: Research Practice Partnership Grants

SERVICE TO THE UNIVERSITY

2023-present Steering committee member for the Eileen Lappin Weiser Learning Sciences Center at the Marsal Family School of Education

2021-2023 Committee member for the Online Learning Experience Committee for the Health Informatics Learning Systems (HILS) online degree

2020-2023 Committee member for the University of Michigan Education Hub (EdHub) for the Marsal Family School of Education

2020 Judge for the James A. Kelly Learning Lever’s Prize Competition, Marsal Family School of Education

DOCTORAL COMMITTEE SERVICE

Forthcoming Rebecca L. Anteck, *HyFlex: Bridging the Divided Class*
Committee: Chris Quintana (Chair), Christopher Brooks (Cognate), Gina Cervetti, Annemarie Palincsar, Donald Peurach, Rebecca M. Quintana

2024 Anjali Singh, *Empowering Data Science Learners Through Learnersourcing and Student-AI Collaboration*
Committee: Christopher Brooks (Co-chair), Xu Wang (Co-chair), Barbara Erikson, Juho Kim, Rebecca M. Quintana (Cognate)

STUDENT MENTORSHIP

Provided research-focused mentorship for emerging scholars by supporting the development of conference proposals, presentations, and journal manuscripts. These students have gone on to pursue educational research opportunities through doctoral programs that will allow them to advance their academic goals.

- 2019-present Jacob Aguinaga began doctoral studies at the University of Michigan in Fall 2022, focusing on learners' experiences in MOOCs.
- 2019-2020 Juan Pinto began doctoral studies at the University of Illinois at Urbana-Champaign in Fall 2020 where he uses learning analytics to improve student outcomes.
- 2017-2021 Yuanru Tan began doctoral studies at the University of Wisconsin, Madison in Winter 2021, where she uses epistemic network analysis methods to understand learner interactions.
- 2020-2021 Jinzhi (Bella) Zhou began doctoral studies at the University of Indiana in Fall 2020, where she focuses on learning sciences theories and methods.

PROFESSIONAL AFFILIATIONS

- 2012-Present American Educational Research Association (AERA) Member of Advanced Technologies for Learning SIG, Division C, Learning Sciences SIG, Online Teaching and Learning SIG
- 2013-Present Association of the Computing Machinery Special Interest Group on Computer-Human Interaction (SIGCHI)
- 2021-Present Association for Educational Communications and Technology (AECT)
- 2013-Present International Society of the Learning Sciences (ISLS)
- 2016-Present Society for Learning Analytics Research (SOLAR)