FULL PROGRAM

FIRST NATIONAL MEETING OF RACIAL JUSTICE IN EARLY MATH

An Inquiry-Based Approach to Problems of Practice

June 27 & 28, 2024
Erikson Institute, Chicago

Erikson Institute
Early Math Collaborative

UIC UNIVERSITY OF ILLINOIS CHICAGO
College of Education

RACIAL JUSTICE IN EARLY MATH

RACIAL JUSTICE IN EARLY MATH

Dear RJEM First National Meeting Participants,

Welcome to Erikson Institute, and the First National Meeting of Racial Justice in Early Math (RJEM). We are thrilled to engage with you in taking an Inquiry Approach to Problems of Practice.

This meeting has attracted attendees and presenters from all over the United States, including Denver, Oregon, New York, California, and Washington DC. They include experts in intervention and teaching, teachers of young children, scholars in early mathematics and racial justice, policymakers and government representatives, committed community members, adult educators and scholars in teacher preparation, cognitive developmental scientists, and of course, parents. Together, we will spend the next two days exploring how issues of racial justice intersect with education in early mathematics.

Although this is the inaugural meeting of RJEM, we understand that issues of racial justice are not new. Racism, in many forms, is threaded in the history of the United States and continues to affect every institution in this country. We also understand that discussions of race and racism are uncomfortable to many people. Some people even insist that merely talking about racism is racist. Others believe that race and racism have little to do with mathematics education, especially early math. This latter belief is rooted in the history of early childhood education as a field which has tended to avoid acknowledging the effects of systemic racism on our youngest students. The RJEM project embraces the discomfort, and we are committed to (1) naming and eliminating systems of racial oppression that support white supremacy, antiblackness, and xenophobia in early math; (2) creating systems and practices to ensure that early math contexts are free of racial oppression; and (3) achieving forms of early math education that are worthy of the children, families, and communities we serve. We are thrilled that you have decided to join us in these commitments.

We hope this is the first of many National Meetings and that each subsequent meeting is a celebration of early mathematics education being a leader of racial justice. On behalf of RJEM, Erikson Institute, and the University of Illinois Chicago, we thank you for being a part of this gathering.

Danny Bernard Martin and *Jennifer McCray* (co-chairs) on behalf of the RJEM Local Planning Committee

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AGENDA

RACIAL JUSTICE IN EARLY MATH

Day 1: Thursday, June 27th

Doors open at 7:45 am

8:00 - 8:45	**BREAKFAST**
8:45 - 9:15	Welcoming & Orientation - room 201/202
9:15 - 10:15	An Organizing Framework for Racial Justice in Early Mathematics *Danny Bernard Martin & Jennifer McCray, room 201/202*
10:15 - 10:55	Home Group Discussions I *See full program (p. 22) for details*
11:00 - 11:30	Q&A with Danny Bernard Martin & Jennifer McCray - room 201/202
11:30 - 12:15	**LUNCH BREAK**
12:15 - 1:15	Concurrent RJEMTalk Sessions *See full program (p. 13) for details*
1:25 - 2:25	"She likes to count the time it takes to cook the rice": Learning from U.S. Latine Families about Everyday Math *Gigliana Melzi & Saraí Coba-Rodriguez, room 201/202*
2:25 - 2:35	**COFFEE BREAK**
2:35 - 2:55	Home Group Discussions II *See full program (p. 22) for details*
3:00 - 4:00	Histories and Futures of (STEM) Educational Justice with Black Families in Evanston *kihana miraya ross & Sepehr Vakil, room 201/202*
4:00 - 4:15	Closing - room 201/202
4:15 - 5:45	RECEPTION & Poster Session: Teacher Inquiry Project RJEM Teaching Fellows *Harris Commons - 2nd Floor*

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Day 2: Friday, June 28th

Doors open at 7:45 am

8:00 - 8:30	**BREAKFAST**
8:30 - 8:45	Orientation for the Day - room 201/202
8:45 - 10:00	PANEL: RJEM Teaching Fellowship Experience *RJEM Teaching Fellows & Mentors, room 201/202* *Moderator: Penny Smith*
10:00 - 10:15	**COFFEE BREAK**
10:15 - 11:15	Planning Curriculum with and for Communities of Color: Tapping into Black and Latiné Kindergartners' Mathematical Brilliance *José Martínez Hinestroza, room 201/202*
11:25 - 12:55	Concurrent Working Group Sessions *See full program (p. 18) for details*
1:00 - 1:45	**LUNCH** & Working Group Share-Out, room 201/202
1:45 - 2:00	Closing - room 201/202

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KEYNOTE SPEAKERS

RACIAL JUSTICE IN EARLY MATH

An Organizing Framework for Racial Justice in Early Mathematics

Thursday, June 27, 9:15 - 10:15 AM

Dr. Danny Bernard Martin

Professor of Education and Mathematics
University Illinois Chicago

Danny Bernard Martin is Professor in the Department of Curriculum and Instruction and the Department of Mathematics, Statistics, and Computer Science at the University of Illinois Chicago. His research is focused on understanding the salience of racialization, socialization, and identity in Black learners' mathematical experiences. Dr. Martin's work is antithetical to perspectives that attempt to fix or repair Black learners. In his work, the ordinary brilliance of Black children is axiomatic. Martin is the Co-Chair of the Racial Justice in Early Math project at Erikson Institute and author of the book Mathematics Success and Failure Among African Youth (2000/2006, Erlbaum), co-author of The Impact of Identity in K–8 Mathematics Learning and Teaching (2013, NCTM), editor of Mathematics Teaching, Learning, and Liberation in the Lives of Black Children (2009, Routledge), and co-editor of The Brilliance of Black Children in Mathematics: Beyond the Numbers and Toward New Discourse (2013, Information Age).

Dr. Jennifer McCray

Associate Research Professor
Erikson Institute

Jennifer McCray is the Co-Chair of the Racial Justice in Early Math project at Erikson Institute, where she also serves as an Associate Research Professor. She is the founding Director and current Principal Investigator of Erikson's Early Math Collaborative, a collective of adult educators, researchers, and students working with hundreds of teachers throughout the U.S. and around the world to improve math instruction for young children. She is the lead author of the IES toolkit Teaching Math to Young Children (out in 2026) and acts as a content expert for the National Center for Family Math. Jennifer's research focuses on pedagogical content knowledge for teaching early mathematics, and she is the first editor of Growing Mathematical Minds: Conversations between Developmental Psychologists and Early Childhood Teachers.

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KEYNOTE SPEAKERS

RACIAL JUSTICE IN EARLY MATH

"She likes to count the time it takes to cook the rice": Learning from U.S. Latine Families about Everyday Math

Thursday, June 27, 1:25 - 2:25 PM

Dr. Gigliana Melzi

Professor of Applied Psychology
New York University

Gigliana Melzi is Professor of Applied Psychology and Affiliated Faculty of Latinx Studies and of the Center for Latin American and Caribbean Studies at New York University. Her research describes culturally and linguistically grounded family practices that support Latine children's early literacy and STEM learning, and how the educational system can leverage these practices to support children's school-based learning. Dr. Melzi adopts a collaborative research stance, working in partnership with Latine communities and educational centers serving Latine families. Her research has been funded by National Institute of Child Health & Development (NICHD), National Science Foundation (NSF), U.S. Department of Health & Human Services, The Spencer Foundation, Brooke Astor Foundation, Brady Education Foundation, and the Heising-Simons Foundation.

Dr. Saraí Coba-Rodriguez

Assistant Professor in Human Development and Learning
University of Illinois Chicago

Saraí Coba-Rodriguez is an Assistant Professor in Human Development and Learning at UIC's Department of Educational Psychology. Her research centers on presenting a more complex, dynamic, and resilient picture of how racially/ linguistically diverse families with young children support their child's early childhood education and overall development. Her qualitative research emphasizes families' strengths, cultural resources, and agency. Most recently, she's added a new line of research that looks at families' experiences with their young child's expulsion from preschool and what that means for the whole family.

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KEYNOTE SPEAKERS

RACIAL JUSTICE IN EARLY MATH

Histories and Futures of (STEM) Educational Justice with Black Families in Evanston

Thursday, June 27, 3:00 - 4:00 PM

Dr. kihana miraya ross

Assistant Professor of African American Studies
Northwestern University

kihana miraya ross earned her doctorate from UC Berkeley in 2016 and is currently an assistant professor of Black Studies at Northwestern University. Her program of research examines antiblackness, Black space, and reparations in education. kihana is currently working on her first documentary exploring Black families' ongoing fight to reopen a school in Evanston's historically Black neighborhood. She also recently received a $4.5M National Science Foundation Racial Equity Grant for a project entitled, "Co-designing STEM Ecologies with Black Communities: Centering History, Heterogeneity, Power, and Place. kihana is currently completing her first book, "Black Space in Education: On antiblackness in schools, educational fugitivity, and how we get free" (University of Chicago).

Dr. Sepehr Vakil

Associate Professor of Learning Sciences
Northwestern University

Sepehr Vakil is an associate professor of Learning Sciences in the School of Education and Social Policy at Northwestern University, and the faculty director of the Technology, Race, Ethics, and Equity in Education Lab. Previously he was Assistant Professor of STEM Education and the Associate Director of Equity & Inclusion in the Center for STEM Education at the University of Texas at Austin. He received his PhD in the Education in Mathematics, Science, and Technology program at UC Berkeley, and his B.S and M.S in Electrical Engineering from UCLA. Dr. Vakil is a leading voice on equitable approaches to tech education, innovation and workforce development, diversity and equity in education, and AI ethics and literacy. He has received funding from an array of sources spanning the federal government, philanthropic foundations, and private industry. He is currently PI on an NSF Racial Equity grant focused on educational justice in STEM education for Black families in Evanston, Illinois.

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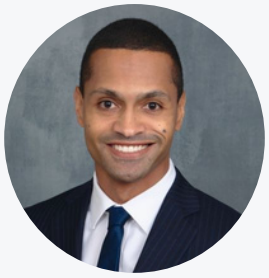
KEYNOTE SPEAKERS

RACIAL JUSTICE IN EARLY MATH

Planning Curriculum with and for Communities of Color: Tapping into Black and Latiné kindergartners' Mathematical Brilliance

Friday, June 28, 10:15 - 11:15 AM



Dr. José Martínez Hinestroza

Assistant Professor of Curriculum and Instruction
Texas State University

José Martínez Hinestroza is an assistant professor in elementary mathematics education in the Department of Curriculum and Instruction at Texas State University. A former kindergarten and elementary school teacher, José's work focuses on bilingual mathematics education. Through his participatory research, he engages in prolonged collaborations with teachers to develop more inclusive bilingual mathematics classrooms. He is the Principal Investigator of the NSF CAREER grant "CAREER: Affirming Bilingual Children's Participation in Mathematics (ABC-Par)."

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SUMMARY OF KEYNOTE SESSIONS

RACIAL JUSTICE IN EARLY MATH

An Organizing Framework for Racial Justice in Early Mathematics

Speakers: *Dr. Danny Bernard Martin (University of Illinois Chicago) and Dr. Jennifer McCray (Erikson Institute)*
Thursday, June 27, 9:15 - 10:15 AM. Room 201/202

Much of the work needed to achieve RJEM is about explaining and making clear how, across multiple levels of influence, racial justice connects directly with early math teaching and learning. As educators committed to RJEM, we need ways to describe both the kinds of problems that exist and our goals for the future. We also need tools and resources that can help the field identify how racial injustice can manifest in early math education and take steps to disrupt it. This presentation offers the RJEM community an emerging organizing framework, based on almost 5 years of work by the RJEM Local Planning Committee with the support of a National Working Group and Advisory Committee.

"She likes to count the time it takes to cook the rice": Learning from U.S. Latine Families about Everyday Math

Speakers: Dr. *Gigliana Melzi (New York University) and Dr. Saraí Coba-Rodriguez (University of Illinois Chicago)*
Thursday, June 27, 1:25 - 2:25 PM. Room 201/202

For far too long, U.S. Latine families have been viewed as uninvolved in their children's education or unable to support their academic development. In this presentation, researchers Melzi and Coba-Rodriguez offer a different lens that challenges pervasive deficit portrayals of U.S. Latine families. They discuss how Latine families support their children's early math learning and provide recommendations for research and practice that honor Latine families' ways of thinking and doing math.

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SUMMARY OF KEYNOTE SESSIONS

RACIAL JUSTICE IN EARLY MATH

Histories and Futures of (STEM) Educational Justice with Black Families in Evanston

Speakers: *Dr. kihana miraya ross and Dr. Sepehr Vakil, (Northwestern University)*
Thursday, June 27, 3:00 - 4:00 PM. Room 201/202

In this talk, the presenters will discuss their ongoing work with Black community members who are spearheading the return of a school to the historic 5th ward neighborhood of Evanston, Illinois. The community has expressed a desire for the new school to simultaneously emphasize STEM learning as well as Black-specific programming. This talk will share emerging findings related to how Black parents and community members are conceptualizing educational justice broadly, and specifically in relation to STEM education.

Planning Curriculum with and for Communities of Color: Tapping into Black and Latiné kindergartners' Mathematical Brilliance

Speakers: *Dr. José Martínez Hinestroza (Texas State University)*
Friday, June 28, 10:15 - 11:15 AM. Room 201/202

This talk will explore an initiative to center Black and Latiné children from the beginning of mathematics curricular planning, rather than adapting pre-existing materials that were not created by and for them and their communities. Dr. Hinestroza will discuss principles guiding the curricular design, including exploring cultural practices with mathematics, welcoming children's diverse ways of being mathematicians and knowing mathematics, and continuously questioning taken for granted mathematics curriculum traditions rooted in whiteness. Examples and considerations of how to design and implement such a curriculum will support the audience in joining children to enhance their own mathematics learning.

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ABOUT
RJEM TEACHING FELLOWSHIP

The Racial Justice in Early Mathematics (RJEM) Teaching Fellowship is a one-year professional development, mentoring, and research opportunity intended to support kindergarten teachers from across the United States.

The main goals of the Fellowship are to support RJEM Teaching Fellows in:

- Cultivating a robust understanding of racial justice in early math.
- Implementing racial justice centered teaching practices in their classrooms.
- Participating in a network of mentorship and peer support.
- Contributing to a growing understanding of how early math teaching can further the cause of racial justice.

The 2023-24 RJEM Teaching Fellows Cohort is composed of a diverse group of five kindergarten and one 1st grade teacher. The six RJEM Teaching Fellows represent different racialized and gendered groups, geosociopolitical contexts as well as years of experience and levels of expertise.

In the 2023-24 school year, the RJEM Teaching Fellows:

- Attended a 2-day in-person orientation at Erikson Institute in June of 2023.
- Participated in six online 3-hour seminar sessions that provided opportunities for them to engage with diverse group of experts in issues of racial justice, math education, children development, and other related topics.
- Attended 90-min individual online mentoring sessions twice a month.
- Implemented racial justice centered practices in their classrooms.
- Completed a Teacher Inquiry Project where they investigate an self-selected topic from a racial justice perspective based on their interests and contexts.

Throughout the year, RJEM Teaching Fellows demonstrated commitment, courage, patience, and humility as they enhanced their own understanding of racial justice in early math, developed and implemented teaching practices and math content that foster the math identities of their children, and disrupted white supremacist beliefs and structures in their own contexts.

Learn more about the Fellowship and RJEM Teaching Fellows at https://earlymath.erikson.edu/2023-24-rjem-teaching-fellowship-cohort.

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RJEM TEACHING FELLOWS

RACIAL JUSTICE IN EARLY MATH

Citlali Arroyo

Citlali Arroyo is a teacher-researcher-scholar from Chicago. She works with students from kindergarten to college and adults continuing their education. Citlali finds her participation in the RJEM Teaching Fellowship fulfilling because she has spent the last decade studying the sociology of urban education, community-based participatory action research, and intergovernmental affairs.

Avonshae Rounds-Kelly

Avonshae Rounds-Kelly is a 6th year Kindergarten teacher transitioning to Baltimore City Public Schools in Maryland. Avonshae graduated from Stevenson University (2018) with a B.A. in Early Childhood Education and in 2022 received a M.A. in Teaching, Leadership, and Cultural Competency from the University of Iowa. In addition to teaching kindergarten, Avonshae is an adjunct professor at Stevenson University where she collaborates with teacher candidates to investigate their identities and biases to create equitable classrooms and instruction.

Sara Orphanides

Sara Orphanides has more than 20 years of experience teaching and learning alongside young children. She graduated from Bank Street College of Education with an MS in Early Childhood and Elementary Education. Currently, Sara is teaching five- and six-year-olds at Carolina Friends School in Durham, North Carolina. In addition to teaching, her greatest loves include her family and the joy of singing with others.

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RJEM TEACHING FELLOWS

RACIAL JUSTICE IN EARLY MATH

Wendolyne Shanchéz Castrejón

Wendolyne Sánchez Castrejón brings over 20 years of dedicated experience to the field of education, specializing in Dual Language instruction and drawing inspiration from the Reggio Emilia approach. Wendolyne has a Bachelor's degree in Elementary Education and a Master's degree in Curriculum and Instruction, and holds endorsements in Bilingual Education. Currently, Wendolyne loves guiding children through high interest learning experiences in kindergarten.

Ashley Shaffner

Ashley currently lives and works in Cincinnati Public Schools, where she has taught Kindergarten for 6 years. Ashley graduated from Miami University in 2018 with a Bachelor's degree in Early Childhood Education, and again in 2022 with a Master's degree in Language and Literacy. In addition to teaching kindergarten, she is an adjunct faculty member at Miami University teaching a math content course.

Sung Yoon

Sung Yoon teaches first grade in Woodinville, Washington and he loves every moment of it! As a Korean-American, immigrant, living in the United States since third grade, he has witnessed how the education system is not always fair to students of minorities like students of color, immigrants, and students with neurodiverse needs. He was so excited when he learned how we can support the students of minorities through the fellowship and even more excited to share his findings. When he is not a teacher, Sung loves to go camping, sailing, and cooking!

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SUMMARY OF TEACHER INQUIRY PROJECTS

RJEM TEACHING FELLOWS

"Looking-Glass Self": Storytelling and Play-based Education in a Chicago Public School Dual Language Kindergarten

Citatli Arroyo

This project explored literacy-based math interventions in a Spanish immersion program by using three picture books from Charlesbridge Publishing "Storytelling Math Series".

Student Identities and Lived Experiences in a Scripted Math Curriculum

Avonshae Rounds-Kelly

In this project, the author recognized that, although a rigorous scripted curriculum is beneficial, the need to incorporate student identities and lived experiences is paramount in providing meaningful math experiences for students.

Dialogue, Documentation, and Shared Joy: Humanizing Math Pedagogies as a Pathway to Racial Justice in Early Math

Sara Orphanides

Documenting and sharing children's math genius in a unit planned within Dr. Gholdy Muhammad's HILL framework for Culturally and Historically Responsive Education shifted a white teacher's math teaching practices and builds relationships with Black students and families.

Children Taking Action for Justice: La Tiendita Project

Wendolyne Sánchez Castrejón

Exposing children to real-life problems empowers students to become activists as they apply math skills and problem-solving abilities, fostering a deeper understanding of equity and justice.

A Comparison of Experiences of a Kindergarten Teacher in Under-Resourced and Well-Resourced Schools

Ashley Shaffner

After moving schools, a kindergarten teacher analyzed the experiences she has had at both schools through a racial justice lens and identified systemic issues that oppress one school and uphold another.

Decentralizing White Supremacy through Counting Collections

Sung Yoon

Sung Yoon researched how white supremacy is evident in his own math curriculum and wondered how he could support more critical thinking with his students and, more importantly, decentralize white supremacy in math. Sung decided to start with the basics of math, through counting, and found lots of success with his students.

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RACIAL JUSTICE IN EARLY MATH

CONCURRENT RJEMTALK SESSIONS AT A GLANCE

Thursday, June 27 from 12:15 to 1:15 PM

See Full Program (pp. 14-17) for summaries of RJEMTalks.

**click on item to go to desired section.*

Critical & Anti-Racist Praxis: Meaningful Math Learning through Play
Room 203

Identity: Nurturing Math Identities through Critical Practice
Room 204

Knowledge Creation: Critical Frameworks for Understanding Racial Justice in Early Math
Room 305

Knowledge Creation: Disrupting Dominant Narrative through Professional Learning
Room 306

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SUMMARY OF RJEMTALKS

RACIAL JUSTICE IN EARLY MATH

Critical & Anti-Racist Praxis: Meaningful Math Learning through Play

Chair: Donna Jonhson
Room 203

Matemanidad: Cultivating Collective Value by Gamifying Instruction

Tamyka Shawanda Morant (District of Columbia Public Schools)

How do you create a school-wide, equity-based, antiracist competitive math trivia tournament for 100% of students where they each have an equitable chance of winning?
In this talk, the presenter and curriculum designer details how she took a Black feminist pedagogical approach to designing a school-wide math tournament that directly challenges the embedded white supremacy of typical math tournaments while providing students an opportunity to deepen their understanding of the Black Lives Matter at School principle, Collective Value, and demonstrate learning of both the math content and practice standards, and the standards for social justice.

Let's Play! Bringing Families Together to Play with Math and Learn about Each Other

Wendolyne Shanchéz Castrejón (Talcott Elementary Chicago Public Schools), Rosalba Granados (Talcott Elementary Chicago Public Schools), & Rebeca Itzkowich (Erikson Institute)

Within a Chicago dual language school in an increasingly gentrified neighborhood, classrooms have an economically, racially, and linguistically diverse student population. Such configurations can, sometimes, create tensions and misunderstandings. In this talk, educators describe their intervention to combat misunderstanding, which not only brought families together to enjoy playing math games and to help them understand the math being taught in the classroom, but also to help breaking barriers that get in the way of families learning about each other, their funds of knowledge, culture and language. Importantly, this was done in the safety of their own child's classroom environment.

SUMMARY OF RJEMTALKS

RACIAL JUSTICE IN EARLY MATH

Identity: Nurturing Math Identities through Critical Practice

Chair: Sisa Pon Renie
Room 204

Exploring Early Mathematics through Picturebooks: A Reflection for Practitioners, Researchers, and Families

Frédérique Yova (Child Care Services Association), Jone Wilson (University of Virginia), and Temple Walkowiak (North Carolina State University)

Based on a case study of the practice of exploring early mathematics through picturebooks and the perspectives of six Head Start adult participants, this session invites participants to reflect on the benefits, but also drawbacks of such practice. The discussion will consider how the practice could prevent all children, especially children of color, from envisioning themselves as mathematicians.

Critical Consciousness as a Path towards Developing Students' Identities as Capable Math Thinkers and Doers in Early Childhood Education and Beyond: A Ten Year Later Analysis

Mariana Alvidrez (New Mexico State University) and Marisol Diaz (CalPoly Ponoma)

This talk investigates the impact of a critical pedagogy in an elementary classroom on fostering mathematical identities and critical thinking in students, particularly those from minoritized Latinx communities. Over a decade ago, Mrs. Duran, influenced by constructivist and socio-constructivist theories, transformed her teaching to focus on inquiry, autonomy, and mistakes as learning opportunities. This shift in teaching philosophy encouraged students to develop metacognitive skills, engage critically with mathematical concepts, and view errors as essential to learning.

SUMMARY OF RJEMTALKS

RACIAL JUSTICE IN EARLY MATH

Knowledge Creation: Critical Frameworks for Understanding Racial Justice in Early Math

Chair: Danny Bernard Martin
Room 305

Latina Mother-led Participatory Action Research to Advance Racial Justice in Mathematics

Monica Gonzalez, Lorena Ortiz, Daniela Foronda, Francia Zelaya, Keretesha Riley, and Frances K. Harper, (University of Tennessee, Knoxville)

Three Latina mothers share their experiences using participatory action research (PAR) to advance racial justice in mathematics education for their own children and children in the local Latinx community. Specifically, they describe what they learned from two PAR projects, one focused on disrupting injustices related to school-based assessments of Latinx children's mathematics abilities and another focused on ability justice for Latinx children with autism. They discuss how they carried out PAR, including what supports helped them execute and study the actions designed to advance racial, linguistic, and ability justice for Latinx children.

Practicing Critical Love: Interrogating Anti-Blackness at the Math Circles of Chicago

Jocelyn Rose Wilcox and Sara Rezvi, (Math Circles of Chicago)

In this session, we will highlight our key findings, learnings, and facilitation processes of reading and reflecting upon Dr. Nicole Joseph's book, *Making Black Girls Count in Math Education* as a community of practice. In particular, we will share our takeaways on: affinity groups and the practice of listening twice and speaking once. We hope to highlight how incorporating and attending to the diverse needs of our teachers and staff have both enhanced our understanding of AR initiatives and also clarified the many places and spaces we still need to continue interrogating ourselves.

Histematics for Early Learners: Using Black History to Teach Mathematics

Akil Parker (All This Math, LLC)

In this session, the presenter will describe the teaching framework they have been developing, known as 'Histematics', and how it is implemented with young learners. Examples of math problems taught to elementary learners will be explained through the use of the Histematics teaching framework. All five elements of the Histematics framework will be explained so that the audience can ascertain how to apply the framework with students and children of their own. This approach serves to decompartmentalize educational practices and embrace the organic overlap of different academic disciplines.

SUMMARY OF RJEMTALKS

RACIAL JUSTICE IN EARLY MATH

Knowledge Creation: Disrupting Dominant Narrative through Professional Learning

Chair: Jennifer McCray
Room 306

Bridging Gender Gaps in STEM: Empowering Spatial Reasoning Skills in Early Childhood Education

Lola Alvarez (Shanghai American School)

This talk will discuss the foundational principles of spatial reasoning, the importance of spatial reasoning skills in fostering gender equity in STEM fields, and practical strategies for integrating spatial reasoning into early childhood STEM education. By addressing this critical aspect of early childhood development, we can help bridge the gender gaps in STEM fields and create more inclusive opportunities for all learners.

"This is so easy!": Disrupting Dominant Narratives that Marginalize in Early Mathematics

Sandra Zuniga Ruiz (San José State University)

Engaging in anti-racist mathematics entails actively challenging dominant narratives in mathematics that serve to marginalize children's brilliance and potential in the classroom. In particular, these dominant narratives (who is seen as a doer of mathematics, what is mathematics and what it means to be smart in math) are critical in early mathematics to disrupt the continuous dehumanization that push out children from having rich mathematical experiences. In this presentation, we will discuss ways in which teacher education can support pre-service teachers to pay attention to these dominant narratives and co-imagine more just possibilities.

Supporting All Learners in Early Math: Embedded Instruction as an Anti-Ableist Approach

Rebecca Anne Swartz (Southern Illinois University-Edwardsville)

All children, regardless of ability or experience deserve to participate in rich math learning! In this RJEM talk, the presenter will highlight how they have used the Embedded Instruction Model to help teacher candidates problem solve how to ensure the success of all children in their mathematics lessons by including explicit goals and strategies for teaching social emotional and executive functioning skills that may get in the way of children's full participation in mathematics activities. This talk will discuss how these strategies help teacher candidates live the anti-bias tenets of our professional community.

RACIAL JUSTICE IN EARLY MATH

CONCURRENT WORKING GROUP SESSIONS AT A GLANCE

Friday, June 28 from 11:25 AM to 12:55 PM

See Full Program (pp. 19-21) for summaries of Working Groups.
**click on item to go to desired section.*

WG1. Breaking the Cycle: Overcoming Math Anxiety as a Parent and Empowering Your Children
Student Lounge (3rd Floor)

WG2. Exploring the Complexities of White Educators Teaching Black, Latine, Asian, Indigenous, and Pacific Islander children
Room 204

WG3. How can Early Math Research Avoid Deficit-Focused Language and Effectively Address Equity Simultaneously?
Room 205

WG4. Numberless Word Problems: How do We Infuse Humanity, Mirrors and Windows, and a Justice-Orientation into Early Childhood Classrooms?
Room 305

WG5. Working Together for Racial Justice in Early Math: Strategies to Combat White Supremacy Culture through Teacher Reflection and Collaboration
Room 203

WG6. Resisting Raciolinguistic Ideologies: Validating Children's Ways of Talking about Mathematical Ideas
Room 201

WG7. The Use of Math as a Punitive Measure and its Effect on Math Identity
Room 219

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SUMMARY OF WORKING GROUP SESSIONS

RACIAL JUSTICE IN EARLY MATH

WG1. Breaking the Cycle: Overcoming Math Anxiety as a Parent and Empowering Your Children

Melissa Kirk (Erikson Institute)
Student Lounge (3rd Floor)

In this session, we will explore the pervasive issue of math anxiety among parents and its potential impact on their children's attitude towards mathematics. We'll discuss potential strategies and techniques for parents to overcome their own math trauma and anxiety, thereby preventing its transfer to the next generation. By the end of the session, participants will leave with a renewed sense of confidence in their ability to overcome math anxiety as parents and empower their children to embrace mathematics with enthusiasm and resilience.

WG2. Exploring the Complexities of White Educators Teaching Black, Latine, Asian, Indigenous, and Pacific Islander children

Amy Parks (Michigan State University) and Candice Love (Vanderbilt University)
Room 204

This working group, led by former elementary school teachers, will encourage participants to reflect on times they have more and less successfully resisted white supremacy in the classroom while teaching mathematics to children of color. The focus will be on negotiating the structures that make such resistance challenging and on naming the ways that conceptualizations of both children and mathematics inform ways white teachers engage in the classroom. Artifacts such as videos and article excerpts will be used to prompt discussion.

WG3. How can Early Math Research avoid Deficit-Focused Language and Effectively Address Equity Simultaneously?

Jennifer McCray (Erikson Institute)
Room 205

It is important address equity in early math education without attributing "achievement" differences among children to racial identity. This concern prompts many researchers to avoid data analysis that uses race to compare results. At the same time, parents and families from disenfranchised groups are very concerned about the systemic differences such analyses reveal, and want those truths addressed. How should researchers discuss, assess, and monitor the effectiveness of early math education for the racially-identified global majority (and others who are underserved) without contributing to the deficit narrative?

SUMMARY OF WORKING GROUP SESSIONS

RACIAL JUSTICE IN EARLY MATH

WG4. Numberless Word Problems: How do We Infuse Humanity, Mirrors and Windows, and a Justice-Orientation into Early Childhood Classrooms?

Sisa Pon Renie (Erikson Insitute), Sung Yoon (Wellington Elementary), Donna Johnson (Erikson Institute), and Rebeca Itzkowich (Erikson Institute)
Room 305

We are excited to share Numberless Word Problems, an instructional routine that brings together thinking critically about racial justice and early mathematics. Come help us think about some of the challenges teachers have experienced in facilitating Numberless Word Problems so that the classroom community experiences the full benefits of this promising routine. This routine is appropriate for grades Kindergarten and up, but during this session we will focus on Kindergarten to 2nd grade.

WG5. Working Together for Racial Justice in Early Math: Strategies to Combat White Supremacy Culture through Teacher Reflection and Collaboration

Carmen Raynor and Sara Orphanides, (Carolina Friends School)
Room 203

How can finding antidotes to white supremacy culture characteristics in our teaching practices support our work for racial justice in early math? As an early childhood team composed of white teachers, this question has been at the forefront of our thinking. In this session we'll share our reflective, collaborative, action-focused work using Tema Okun's framework for dismantling white supremacy culture. We'll talk about the shifts this created in our program, particularly in mathematics. Then, with music, creation, and collaboration, we'll look together at possibilities for building pro-Blackness in our context, your contexts, and beyond.

SUMMARY OF WORKING GROUP SESSIONS

RACIAL JUSTICE IN EARLY MATH

WG6. Resisting Raciolinguistic Ideologies: Validating Children's Ways of Talking about Mathematical Ideas

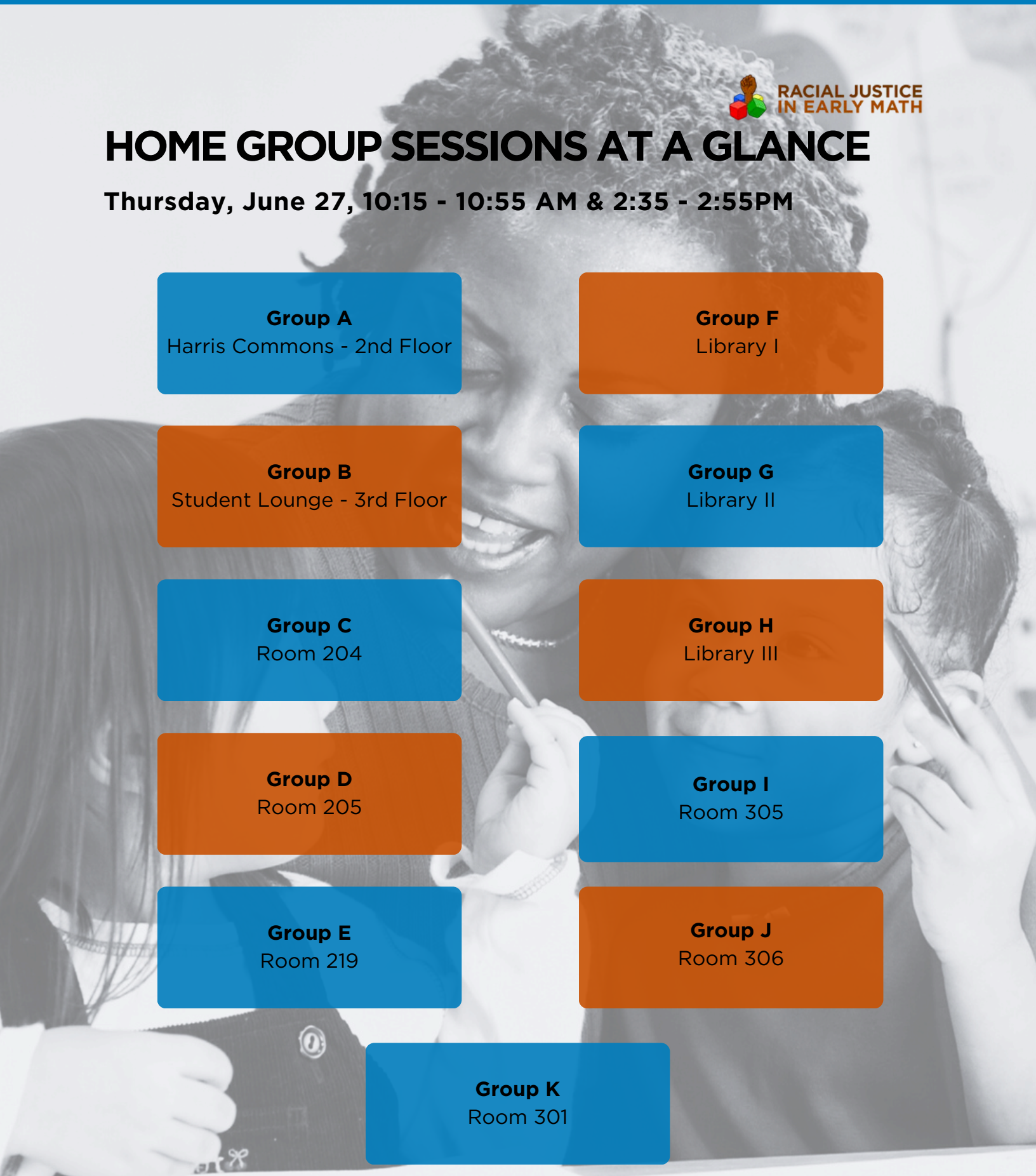
José Martínez Hinestroza and Gisela Vaca Soria, (Texas State University)
Room 201

Raciolinguistics acknowledge that perceptions of race influence perceptions of a speaker's language practices. For example, problematic perceptions of Black or Latiné children may cloud how teachers assess their mathematical thinking, regardless of how accurate, complex, or generative these ideas might be. In this working group, we will discuss our (the participants' and the facilitators') experiences with raciolinguistics. Then, we will analyze together classroom examples to listen for meaning in children's mathematical explanations. We will conclude by creating plans of action to interrupt raciolinguistic ideologies in our work with children so that we validate their and their communities' ways of communicating.

WG7. The Use of Math as a Punitive Measure and its Effect on Math Identity

Miriam Kaboré (Erikson Institute) and Ashley Shaffner (Sayler Park School)
Room 219

The disproportionate application of school discipline practices towards black students has a concerning prevalence which has been extensively documented, including its long lasting effect on students of color. Due to this, the unique form of punishment of assigning math worksheets to 'disruptive' children sits perfectly at the intersection between early math and racial justice. Through this working group, we will collaboratively track the causes and effects of this practice, and brainstorm solutions for addressing issues such as the formation of negative math identity, destructive teachers' discipline approaches, and harmful school practices.



RACIAL JUSTICE IN EARLY MATH

HOME GROUP SESSIONS AT A GLANCE

Thursday, June 27, 10:15 - 10:55 AM & 2:35 - 2:55PM

Group A
Harris Commons - 2nd Floor

Group B
Student Lounge - 3rd Floor

Group C
Room 204

Group D
Room 205

Group E
Room 219

Group F
Library I

Group G
Library II

Group H
Library III

Group I
Room 305

Group J
Room 306

Group K
Room 301

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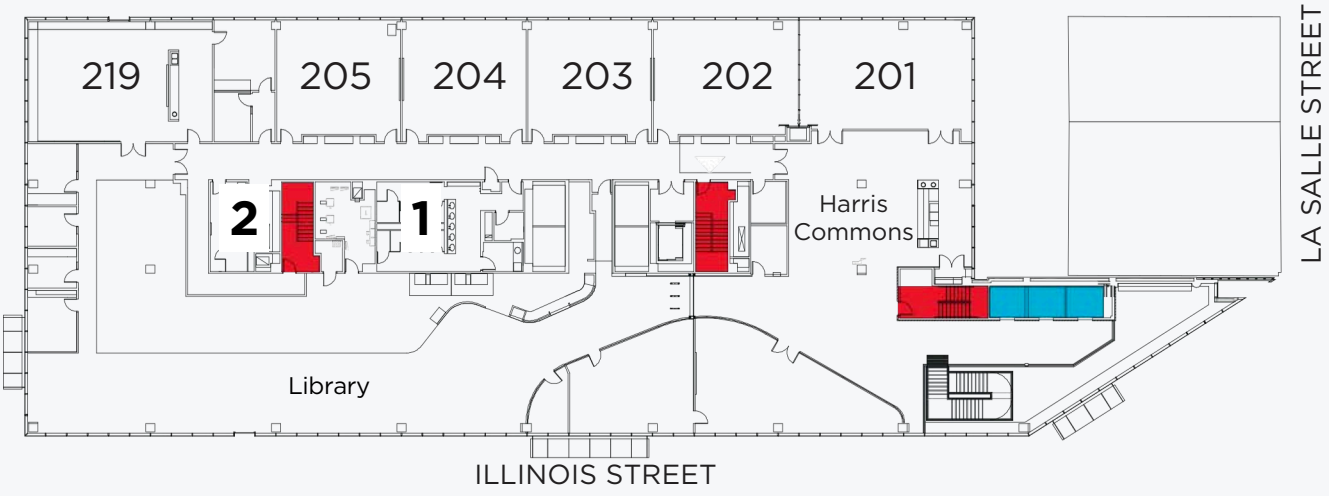
MAP OF ERIKSON INSTITUTE

RACIAL JUSTICE IN EARLY MATH

451 N La Salle Dr
Chicago, IL

FLOOR 2

IN CASE OF FIRE
DO NOT USE ELEVATORS
PLEASE USE STAIRS



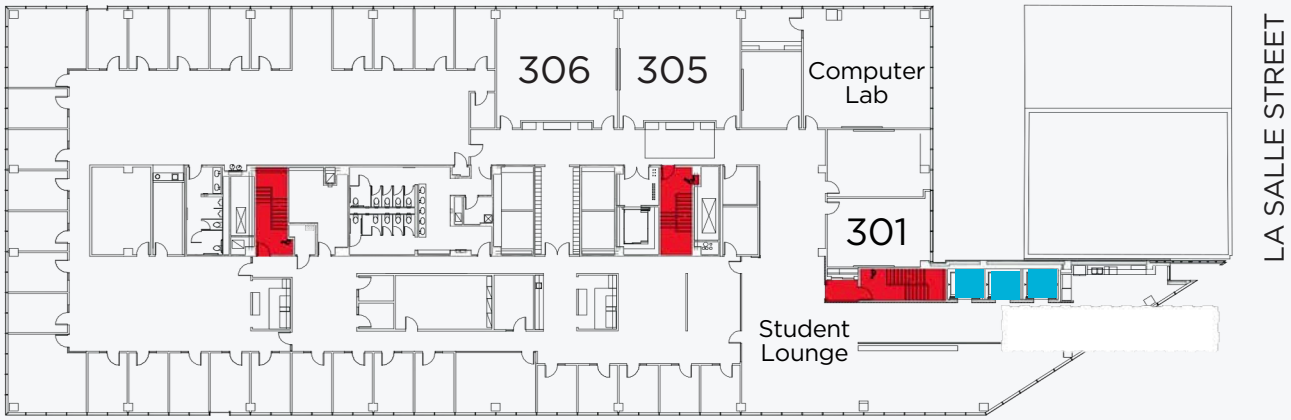
1. Woman's bathroom, lactation room
2. All gender bathroom

Elevators

Emergency exits

FLOOR 3

IN CASE OF FIRE
DO NOT USE ELEVATORS
PLEASE USE STAIRS



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LOCAL RESTAURANTS GUIDE

Indian House Restaurant $$

59 W Grand Ave
Offering over 250 menu items, with both classic dishes & a lunch buffet.
Vegetarian, Vegan, and Halal Options

Thursday: 11:00 am - 2:30 pm, 5:00 pm - 9:30 pm
Friday: 11:00 am - 2:30 pm, 5:00 pm - 10:00 pm

The Smith $$

400 N Clark St
Elevated American fare and craft cocktails.
Vegetarian and Vegan Options

Thursday: 11:30 am - 10:00 pm
Friday: 11:30 am - 11:00 pm

PLANTA Queen $$

413 N Clark St
Vegan restaurant offering a variety of Asian dishes.
Vegan Options

Thursday: 11:30 am - 9:30 pm
Friday: 11:30 am - 10:00 pm

Merchandise Mart $

222 W Merchandise Mart Plaza
The large food court on the second floor offers various options.
Vegetarian and Vegan Options

Thursday: 9:00 am - 5:00 pm
Friday: 9:00 am - 5:00 pm

Cocoro Japanese $$

668 N Wells St
Itzakaya-style Japanese Cuisine and sushi.
Vegetarian and Gluten -Free Options

Thursday: 11:00 am - 2:30 pm, 5:00 pm - 9:30 pm
Friday: 11:00 am - 2:30 pm, 5:00 pm - 10:00 pm

Torchio Pasta Bar $$

738 N Wells St
Handmade pasta paired with authentic Italian recipes and seasonal ingredients.
Gluten-free and Vegetarian Options

Thursday: 5:00 pm - 9:00 pm
Friday: 5:00 am - 10:00 pm

Schneider Deli $

600 N La Salle Dr
Traditional deli offering classic staples such as bagels, sandwiches, and nosh.
Kosher and Vegetarian Options

Thursday: 7:00 am - 2:00 am
Friday: 7:00 am - 2:00 am

Portillo's & Barnelli's $

100 W Ontario St
Iconic Chicago chain serving homemade Italian beef sandwiches and Chicago-style hot dogs.
Vegan Options

Thursday: 10:00 am - 1:00 am
Friday: 10:00 am - 1:00 am

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