NCTM 2018 Research Conference
Schedule-at-a-Glance: Monday/Tuesday

REGISTRATION
Monday 4:00 p.m.–6:00 p.m.
Tuesday 7:30 a.m.–2:00 p.m.

Learn more at **www.nctm.org/researchconference** or download our app at **www.nctm.org/confapp**.
Connect with other attendees by using **#NCTMresearch** on Twitter, Facebook, and Instagram.

Legend
Research Report | Research Symposium | Invited Session
Discussion Session | Poster Session | Opening/Plenary Session

	Room 202 A	Room 201	Room 202B	Room 203A	Room 203B	Room 204A	Room 204B	Room 204C	Room 209A	Room 209B	Room 209C	206	207A
Monday 5:30 p.m.-7:00 p.m.	**You, Advocacy, and Policy & Legislation inside the Beltway** Della B. Cronin & James Brown #1: Opening Session – Room 202A												
Tuesday 8:30 a.m.-9:45 a.m.	#2: **Demystifying the JRME Revise and Resubmit Review Process** (Cai, Spencer)	#3: **Investigating Racism with Math: Racial Bias, Quadratics, and Combinatorics** (Gatza)	#4: **Bold Problem Solving: A New Construct for Gender Equity Research** (Theule Lubienski, Makowski, Miller)	Research Reports Session #5: **Do Assessments of Teacher Knowledge Align with Expectations for Students?** (Copur-Genturk, Rasiej) **A Comparison of Self-Reported Teacher Learning to Validated Measures** (Copur-Genturk, Thacker)	Research Reports Session #6: **(Re)Defining Access and Equity in Preparing for the edTPA** (Mickle Moldavan) **An intervention in teacher education focusing on the role of assumptions** (G. Stylianides, A. Stylianides)	Research Reports Session #7: **A Meta Analysis: Writing in Mathematics Classroom** (Bicer, R. Capraro, M. Capraro, Y. Lee) **Math & Literacy: The School-wide Impact of a Focus on Oral Language** (Shea, Shanahan)	Research Reports Session #8: **A Model to Develop Coherent Mathematics Instruction in Elementary Schools** (McGee, Brewer, Gonulates) **Supporting Beginning K-5 Teachers to Counter Deficit Views of Students** (Scott)		Research Reports Session #10: **Supporting Mathematical Play in Home Environments** (Linder) **"Incidental" mathematics during everyday events at home: A case study** (A. Anderson, J. Anderson)	#11: **Engendering Reflective Abstraction of Fraction and Algebra Concepts** (Simon, Hackenberg, Norton)	Research Reports Session #12: **Comprehensive Review of Assessments of Mathematics in Early Childhood** (Day-Hess, Clements, Ganzar, Pugia, Sarama) **Review of Early Childhood Mathematics Curricular Activities** (Simoni, Clements, Day-Hess, Germeroth, Sarama)	Research Reports Session #13: **Towards equity: Examining math educators' histories, values and priorities** (Livers)	#14: **Informal Kindergarten Mathematics Diagnostic: A Validation Study** (Herron, Holaway)
10:00 a.m.-11:15 a.m.	#15: **Funding Opportunities and Resources at the Institute of Education Sciences** (Chhin, Brasiel)	#16: **The Neoliberal Context of Equity Storylines** (Przybyla-Kuchek, Singleton)	#17: **Let›s Talk About Professional Development Models That Work** (Rigelman, Gray, Lewis, McQueen, Prigodich)	Research Reports Session #18: **Access to Mathematical Discussion for Students with Disabilities** (Lambert, Hunt, Yeh) **Assistive technology for hands-on learning by children with disabilities** (McGarvey)	Research Reports Session #19: **Advancing A Multilevel Model of Symbolic Mathematics Language Literacy** (Headley) **Mathematical Literacy Citizenship: Share and Tell** (Kurz)	Research Reports Session #20: **Alignment of Support Structures for Active Learning in College Calculus** (Kress, Webb) **The Efficacy of the Mathematics Studio Model Professional Development** (Melhuish, Fagan, J.M.Shaughnessy, White)	Research Reports Session #21: **An Exploration of Fact Fluency Development in 150,000 Elementary Students** (Rich, Bates) **Leveraging Tutorial Math Instructional Software to Enhance Math Talk** (Anderson-Pence)	#22: **A Learning Progression for the Function Concept as a Basis for Assessment** (Graf, Eames, Fife, Lewis, Ohls, Brady)	Research Reports Session #23: **Analyzing the Impact of Video Representation Complexity on PST Noticing** (Castro Superfine, Bragelman) **Student Noticing in Function Representations** (Sawrey)	#24: **Models and Learning Paths to Support All Students to Learn Fractions** (Lewis, Fuson, Saxe, Schoen, Takahashi, Watanabe)	Research Reports Session #25: **Length Measurement in the Early Years: Teaching with Learning Trajectories** (Sarama, Barrett, Clements, Cullen, Dolgin) **Young Children's Algebraic Reasoning Abilities** (Cavanagh)	#26: **Potent Conceptual Frameworks: Lessons from the NCTM Research Compendium** (Cai, Cobb, de Freitas, Langer-Osuna, Stinson)	#27: **Middle School and College Partnership in Concrete Math Interventions** (Burchard, Bleiler, Eldridge, Moyer, Schultz)
11:30 a.m.-12:45 p.m.	#28: **Asset-Based Approaches to Mathematics Education Research and Practice** (Celedon-Pattichis, Lunney-Borden, Drake, Aguirre, Koestler, Lopez Leiva, Roth McDuffie)	#29: **Studying Networked Improvement Communities: A Way to Improve Math Teaching** (Smith, Walters)	#30: **Critical Theoretical Perspectives on Disability and Mathematics Education** (Lambert, Hunt, Sinclair, Tan)	Research Reports Session #31: **Applying a Validation Framework to a Learning Trajectory on Similarity** (Shah, Belcher, Confrey, McGowan) **Unpacking Learning Trajectories during Coach-Facilitated Lesson Study** (Suh, Birkhead, Farmer, Galanti, Seshaiyer)	Research Reports Session #32: **Changes in Questioning Practices to Support English Learners** (Roberts, Spina) **Pedagogical Listening: hearing and responding to student struggle** (Hintz, English, Tyson)	Research Reports Session #33: **Changing Teachers' Planning Practices Through Sustained Feedback** (Popovic, Kartal, Morrissey) **Quantitative Research linking Teacher Job Resources to Student Achievement** (Stokes-Levine)	Research Reports Session #34: **Contradictions and Tensions as Potential Levers for Math Teachers' Learning** (Baldinger) **Conventions as Choices or Rules: Teachers' Understandings** (Vishnubhotla, Moore, Paoletti, Rahman, Silverman)	#35: **Classroom Instruction that Engages High School Students with Mathematics** (Jansen, Dietiker, Horn, Miller, Renninger)	Research Reports Session #36: **Cultivating Equity-Mindedness for the Teaching of Mathematics** (Colum) **Mathematics for Liberation and Allyship: Social Justice Mathematics Teachers** (Kokka)	#37: **Rigorous Research to Improve Learning in Elementary Math for All Students** (Chhin, Blanton, Booth, Fuchs, Powell, Brasiel)	Research Reports Session #38: **Co-teaching and the PrimeD framework: Radicals and Rational Exponents** (Rakes, Kirvan, Witkowski) **Identifying Changes in Prospective Secondary Teachers Conceptions of Proof** (Boyle)	#39 **Could I publish this in MTE? Advice from published manuscripts in the Mathematics Teacher Educator journal** (Crespo, Chao, Yow)	#40: **TRU Growth and Development: Creating and Analyzing Case Studies** (D.Wilson, Kent, Yagielski)
1:45 p.m.-3:00 p.m.	#41: **Understanding Student Understandings: Perspectives of Progress Monitoring** (Dougherty, DeLeeuw)	#42: **Enhancing Instruction in Co-Taught Classrooms through Coaching Cycles** (Harbour, Livers)	#43: **Measuring Mathematical Knowledge for Teaching with Visual Representations** (Louie, Neumayer DePiper, Nikula)	Research Reports Session #44: **Cultivating Mathematical Affections through Engagement in Service-Learning** (J. Wilkerson) **Teachers Ascribing to Different Implicit Theories and the Role of Mistakes** (Watson, Barlow, Gerstenschlager, Hartland, Willingham)	Research Reports Session #45: **Developing Secondary Math and Science Teacher Leaders in Rural Districts** (Yow, Irvin, Lotter) **Predicting STEM Majors: Analysis of Longitudinal Study** (Gillespie, Witta)	Research Reports Session #46: **Questioning Statistics to Open up New Ways of Being Mathematician** (S.Cannon) **The Development of Students' Language in Geometric Reasoning** (Joswick, Battista)	Research Reports Session #47: **Identifying Gaps in Pre-service and Novice Teachers' Assessment Literacy** (Amit, Hoch) **Reflective Assessment and Feedback in High School Mathematics** (Baliram)	#48: **Contrasting Perspectives on Multiplication, Area and Combinatorial Problems** (Izsák, Jacobson, Tillema, Lehrer)	Research Reports Session #49: **Researchers› use of video records to study the work of teaching** (Gadd) **Using Video Recall for Integrated I Partner Teachers' Professional Growth** (Dunleavy)	#50: **Exploring Equity in the Context of Mathematics Teacher Education Practice** (Masters Goffney, Chao, Gholson, Khalil, Willis, Berry, Thames)	Research Reports Session #51: **Korean Students' Profiles of Motivational Constructs and Engagement** (Hwang, Ko) **Relationships of home, student, school, and classroom with math achievement** (R. Miller)	#52: **Graduate Student, Junior Faculty, and Researcher Mentoring Session** (NCTM Research Committee)	#53: **CCSM Triple Threat: Focused PD, Aligned Curriculum, & a Hands-On Approach** (Canzone, Hyde, Valbuena)
3:15 p.m.-4:30 p.m.	#54: **Relevance in Mathematics Education Research: Promoting the Progress of Science** (Ferrini-Mundy)	#55: **Attending to Culturally Responsive Teaching Beliefs** (Morge, Pugalee)	#56: **Building a K - 2 Early Algebra Learning Progression for Diverse Learners** (Blanton, Stephens)	Research Reports Session #57: **Examining Student Thinking to Better Connect the Multiplicative Field** (McMillan) **Revealing Base Ten Understanding Through Written Formative Assessment Tasks** (Fletcher, Brayer Ebby, Hulbert)	Research Reports Session #58: **A Role-playing Assessment for Posing Purposeful Questions** (Grosser-Clarkson, Dunsworth) **Understanding The Student Perspective Through Dynamic Technology** (Manzo, Hulse, Ottmar)	Research Reports Session #59: **Self-efficacy: The Mathematics Education of African American Males** (L.Williams) **What gets checked at the door? Embracing students› complex math identities** (Ruef)	Research Reports Session #60: **Seventh Grade Students' Algebraic Reasoning—Modeling and Structure Cases** (Kanbir) **Who›s Really Ready? Findings from the 8th Grade Algebra Readiness Study** (Walters, Cade, Eisner, Sorensen)	#61: **Time Matters: Developing Useable Knowledge for Teaching Mathematics** (DiNapoli, Berk, Mixell, Willoughby, Young, Santagata)	Research Reports Session #62: **Learning to lead mathematical discussions through the adaptive cycles** (X.Han) **Supporting Teachers in Fostering Small-Group, Student-to-Student Discourse** (Quebec Fuentes)	#63: **Investigating Alignment in Teachers› Understanding and Use of Curriculum** (Choppin, Borys, Davis, Drake, Roth McDuffie)	Research Reports Session #64: **Indigenous knowledge in Canadian mathematics and science education** (Lunney Borden, Glanfield, Wiseman) **Students' Negotiation of Equitable Strategies for Collaborative Math** (Harper)	Research Reports Session #65: **Teachers' Interactions around Meaningful Mathematics Learning Experiences** (Gonulates, Brewere, McGee) **What does it mean to "do math" in a Math Teachers' Circle?** (Peck, Erickson, Parker Renga, Wu)	#66: **What is the Role of Computational Thinking in Math Education?** (Webb)
4:30 p.m.-6:00 p.m.	**Poster Sessions – www.nctm.org/RCPosters – with Reception –** L Street Bridge												

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Legend
Research Report | Research Symposium | Invited Session
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Wednesday 8:00 a.m.-9:15 a.m.	#115: **Building Effective High School Mathematics Programs for Each and Every Student** (Larson)	#116: **Advocacy and Action in Mathematics Teacher Education** (Kalinec-Craig, Khalil, Masters Goffney, McGraw, Sorto)	#117: **Planning for Inquiry Lessons Viewed Through Multiple Perspectives** (P. Bailey)	Research Reports Session #118: **Improving Latin@s self-efficacy in meaningful math digital spaces** (Viera, Kosheleva, Saldana) **Teaching Students to Ask Questions as a Strategy to Persevere** (Wilkes)	Research Reports Session #119: **Exploration and Investigation: Two Ways to Use Cognitively Demanding Tasks** (Kelly) **Differentiating Linear Function Instruction for Eighth Grade Students** (Hackenberg, Aydeniz, Borowski, Jones, Matyska)	Research Reports Session #120: **Middle School Mathematics Teachers' Perceptions of Curriculum Design** (Davis, Choppin, Drake, Roth McDuffie) **The nature of explorations: A comparative analysis of written lessons** (Dietiker, Richman)	Research Reports Session #121: **Portfolio Problems to Mediate Metacognitive Thinking during Problem Solving** (Hancock) **The personal nature of collective problem posing by middle years students** (Armstrong)	#122: **Components of and Supports for Productive Lesson Study Collaboration** (Murata, Akiba, Fabrega, Howard)	Research Reports Session #123: **Massive Open Online Courses (MOOCs) and Mathematics Knowledge for Teaching** (Vega, Crawford-Ferre, Trakas) **What Effect Does the Hybrid Class Format Have on Classroom Interactions?** (Seneres)	#124: **PrimeD: A Framework to Guide PD, Embed Evaluation, and Structure Research** (Ronau, Bush, Mohr-Schroeder, Saderholm, Rakes)	Research Reports Session #125: **How Positioning Affects Student Learning in an Inquiry-Based Classroom** (Curtis, Siebert)
9:30 a.m.-11:00 a.m.	**Unpacking the "Urban" in Urban Mathematics Education** Erika Bullock & Gregory Larnell #126: Plenary Session – Room 202A										
11:15 a.m.-12:30 p.m.	#127: **Research Across Boundaries: Why Attend an ICME** (Burrill, Remillard, Karunakaran, Strutchens, Zelkowski)	#128: **Teacher Actions to Support Productive Struggle** (Keels, J. Han, Spangler)		Research Reports Session #130: **Measurement and Label Conceptions of Variables and Fractions** (Beckmann) **Mixture Rasch Analysis of Middle Grades Teachers' Reasoning About Fractions** (Olmez, Izsák)	Research Reports Session #131: **Leaping from Discrete to Continuous X-Axes in Science: 6th Grade Struggles** (S. Boote, D. Boote) **National Study of Mathematics Intervention Classes at the Middle Grades** (Brodesky, Fagan, Zweig)	Research Reports Session #132: **How "Common" is Common Core? An Analysis of Middle Grades Math Standards** (Dingman, Homem, Namakshi, Pullin) **Parent communication of math curriculum reform: A phenomenographic study** (McGarvey, McFeetors)	Research Reports Session #133: **Preschool Teachers' Math Talk: Effective Math Domains, Syntax and Purpose** (Swaminathan, Trawick-Smith) **Preservice Teachers' Multiple Perspectives on Teaching and Learning** (Burton, Cardullo, Tripp)		Research Reports Session #135: **Preservice Teachers Understanding and Use of Culturally Responsive Teaching** (Ramsay-Jordan) **Prospective Teachers Incorporating Children's Home and Community Knowledge** (Kalinec-Craig, Jablon Stoehr, Turner)	#136: **Identity Matters: Working with Minoritized Teachers and Students** (Chazan, Brantlinger, Clark, Gutierrez, Quintos)	Research Reports Session #137: **Preservice teacher attempts to link mathematics and culture** (Trask, Martin) **Prospective Elementary Teachers of Mathematics Consider Student Labeling** (Kitchen, Garcia-Olp, VanOoyik)
1:30 p.m.-2:45 p.m.	#138: **MET Grant Research & Research Findings** (Connelly, Dickenson, I)	#139: **Designing Simulations to Advance Pre-Service Teachers' Knowledge and Skills** (Boerst, Prawat, Shaughnessy, Pfaff)	#140: **Northern Exposure: Canadian Lessons on Excellence and Equity in Mathematics** (Silver, Glanfield, Sinclair, Suurtamm)	Research Reports Session #141: **Pre-Service Teachers' Understanding of the CCSSMPs in the Work of Teaching** (Mortimer) **Prospective Teachers Anticipate Challenges with Fostering Problem Solving** (Keazer, Jung)	Research Reports Session #142: **Preservice Teachers' Mathematics Knowledge for Teaching: Video Analysis** (Flores, G. Wang, Y. Wang, Yi) **Profiles of Teacher Candidates' Responsiveness to Avatar Student Thinking** (Fleming, Grosser-Clarkson, Levin)	Research Reports Session #143: **Prospective Secondary Teachers' Conceptions of Proof and Teaching of Proof** (Park, Conner) **Prospective Secondary Teachers' Orientations toward Mathematical Processes** (T. Cannon)	Research Reports Session #144: **Education Technology, Achievement and Orientation: A MetaAnalysis** (Rakes, Bush, Pugalee, Ronau) **Enhancing Preservice Teacher Knowledge of Dynamic Geometry Task Quality** (Trocki)	#145: **Concept Images, Statistical Variability, and Interactive Dynamic Technology** (Burrill, Dick, Peters)	Research Reports Session #146: **Evaluating the impact of Dynamic Measurement on students' thinking of area** (Basu, Panorkou) **Using Dynamic Design to Illustrate the Multiplicative Relationship of Area** (Panorkou, Vishnubhotla)	#147: **Empowering Mathematics Teachers' Change Agency** (Badertscher, Winger, Gates)	Research Reports Session #148: **Use of the Bar Model to Communicate Relational Thinking** (Van Vooren) **Using meaning fields to understand students' hybridized representations** (Savich, Jacobson)
3:00 p.m.-4:15 p.m.		#150: **Using Rubrics to Make Equity the Focus of Teacher Professional Development** (J. Wilson, Kimble)	#151: **HS Common Core Math Connections with Science, Technology, and Engineering** (L. Walker)	Research Reports Session #152: **Identity Development of Prospective Teachers During Practicum Experience** (Gomez) **Video as a Tool to Support Teacher Learning: A Cross-cultural Analysis** (Ding, Li, Luo, Manfredonia)	Research Reports Session #153: **STEM PBL in Mathematics: Improving Teacher Knowledge and Interest** (Nite, Allen)	Research Reports Session #154: **Introducing Residual Criterion for Line of "Good" Fit in Grade 8 Classrooms** (Nielsen, Adams, Yopp)	Research Reports Session #155: **Divergent Thinking and Creativity with In-Service Mathematics Teachers** (Patterson, Corey) **Enhancing Preservice Teachers' Specialized knowledge: An Intervention Study** (Y. Wang, Flores, G. Wang, Yi)	#156: **Engaging in Lesson Study Through Long Term Professional Development** (Hummer, Cirillo, Melville, Cresci, Huebner, Reed, Hiebert)	Research Reports Session #157: **Exploring factors related to High Schoolers' algebra achievement** (Sharpe, Marsh) **Investigating the Preparation of Algebra Teachers** (Newton, Jung)	#158: **Improving Mathematics Teaching and Learning Through Formative Assessment** (Brayer Ebby, Hulbert, Laird, Petit, Remillard, Taton)	Research Reports Session #159: **Factors that influence high school mathematics teachers' uses of technology** (McCulloch, Harrison, Hollebrands, Lee, Mutlu) **Latinx engagement in math and music explored through the lens of CHAT** (Kosheleva, Saldana, Viera)

NCTM RESEARCH CONFERENCE 2018
April 23-25 | Washington, DC

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