

**Sandra Mammano Linder**  
College of Education  
407F Old Main, Clemson, SC 29634  
[sandram@clemson.edu](mailto:sandram@clemson.edu)

**Professional Appointments**

Professor, Early Childhood Mathematics Education	Clemson University	2020-Present
Associate Professor, EC Mathematics Education	Clemson University	2015-2020
Center Director, SC Center of Excellence for Innovation In Math and Science	Clemson University	2018-2020
Coordinator, Early Childhood Education	Clemson University	2018-2020/ 2012-2014
Assistant Professor, EC Mathematics Education	Clemson University	2009-2015
Adjunct Instructor, Early Childhood/Elementary	Clemson University	2006-2009
Graduate Research Assistant, Department of Mathematics	Clemson University	2006-2009

**Academic Degrees**

Ph.D., Curriculum and Instruction Clemson University, Clemson, SC Dissertation Title: Exploring teacher perceptions of influential facilitators of K-5 mathematics professional development: A mixed methods investigation	2009
M.Ed., Elementary Education Georgian Court University, Lakewood, NJ	2005
B.F.A. Dance/Dance Education Montclair State University, Upper Montclair, NJ	2001

**Other Professional Experience**

Guest Teacher (weekly small group math lessons to K-1 students) Clemson Elementary School, Clemson, SC	2016-2019
Guest Teacher (model lessons to 4K classrooms) Chesterfield School District, Chesterfield, SC	2018-2020
Guest Teacher (model lessons to K-5 classrooms) Greenville School District, Greenville, SC	2007-2009
3 <sup>rd</sup> Grade Teacher Brick Township Public Schools, Brick, NJ	2004-2005
Permanent Substitute (K-5) Jackson Township Public Schools, Jackson, NJ	2003-2004
Substitute Teacher (K-5) Brick Township Public Schools, Brick, NJ	2002-2003

Dance Teacher (Preschool-Adult) 1999-2001  
Dance Designs, Fair Lawn, NJ

Dance Teacher (Preschool-Adult) 1995-1997  
Yvette's Dance Studio, Cranford, NJ

## Research

### Publications: Books

Linder, S.M., Lee, C., & High, K. (Forthcoming). *The handbook of STEM faculty development*. Information Age Publishing.

Deaton, C.M., Linder, S.M., Herron, J., Visser, R. (Eds). (2020). *Using mobiles in early childhood and elementary settings*. Information Age Publishing.

### Publications: National/International Refereed Articles

Gao, Q, Linder, S.M., & Hall, A. (In Press). Alternative practicum experiences for early childhood preservice teachers. *The Educational Forum*.

Gao, Q. Hall, A., Linder, S.M., Leonard, A., & Qian, M. (In Press). Promoting head start dual language learners' social and emotional development through creative drama. *Early Childhood Education Journal*.

Fan, X., Linder, S.M., D'Amico, L.K., White, K.M., & Pawloski, T. (In Press). Identifying the needs of prekindergarten children: A focus on health and wellbeing and family environment. *Early Childhood Education Journal*.

Walter, A.A., Van Puymbroeck, M., Townsend, J., Linder, S.M., & Schmid, A.A. (In Press). Therapeutic yoga is feasible for informal caregivers: A multi-method pilot study. *Activities, Adaptation and Aging*.

Linder, S.M. & Bennett, A. (2020). Leveraging read alouds for mathematical connections. *Mathematics Teacher: Learning & Teaching PK-12*, 13(4), 317-321.

Linder, S.M. & Emerson, A. (2019). Increasing family mathematics play interactions through a take-home math bag intervention. *Journal of Research in Childhood Education*, 1-22.

Emerson, A. & Linder, S.M. (2019). A review of research of the Reggio-Inspired approach: An integrative reframing. *Early Years: An International Research Journal*, 1-15.

Tejada, A. & Linder, S.M. (2018). The influence of child sexual abuse on preschool aged children. *Early Child Development and Care*, 1-11.

Linder, S.M. & Simpson, A. (2018). Towards an understanding of early childhood mathematics education: A systematic review of the literature related to practicing and prospective teachers. *Contemporary Issues in Early Childhood*, 19(3), 274-296.

Emerson, A. & Linder, S.M. (2017). A play bag intervention: Bridging home and school. *Kappa Delta Pi Record*. 54(2), 78-81

Smart, J.B., & Linder, S.M. (2017). Development, validation, and implementation of the Elementary Mathematics Motivation Inventory (EMMI): Examining motivational constructs in elementary mathematics. *Fields Mathematics Education Journal*, 3(1), 2-16.

Jamil, F., Linder, S.M., & Stegeline, D. (2017). Teacher beliefs about early childhood STEAM education: Promises, challenges, and moving forward with intentionality. *Early Childhood Education Journal*, 46(4), 409-417.

- Walter, A.A., Van Puymbroeck, M., Townsend, J., Linder, S.M., Schmid, A.A. (2017). A Systematic Review of Mind and Body Complementary Health Practices for Informal Caregivers. *American Journal of Recreational Therapy*, 16(3), 29-35.
- Linder, S.M., Emerson, A., Heffron, B., Shevlin, E., Vest, A. (2016). STEM use in Early Childhood: Viewpoints from the Field. *Young Children*, 71(3), 87-91.
- Simpson, A. & Linder, S.M. (2016). The indirect effect of children's gender on early childhood educators' mathematical talk. *Teaching and Teacher Education*, 54, 44-53.
- Linder, S.M., Rembert, K., Simpson, A., & Ramey, M.D. (2016). A mixed- methods investigation of early childhood professional development for providers and recipients in the United States. *Professional Development in Education*, 42 (1), 123-149.
- Linder, S.M., Smart, J.B., & Cribbs, J. (2015). A multi method investigation of mathematics motivation for elementary age students. *School Science and Mathematics*, 115(8), 392-403.
- Bannister, N. & Linder, S.M. (2015). Teaching for learning: Recasting a traditionally summative assessment as an intentionally formative experience. *The Educational Forum*, 79(2), 190-199.
- Linder, S.M. (2015). Back to the beach! *Teaching Children Mathematics*, 21(8), 464-465.
- Cribbs, J. & Linder, S.M. (2015). Bridging environments: Introducing hybrid space to the elementary classroom. *Childhood Education*, 91(1), 41-45.
- Crowe, B.M., Puymbroeck, M.V., Linder, S.M., McGuire, F.A., & Watt, P.J. (2015). The effects of yoga participation on women's quality of life and symptom management during the menopausal transition: A pilot study. *Health Care for Women International*, 36(10), 1124-1142.
- Hawkins, B.L., McGuire, F.A., Linder S.M., & Britt, T.W. (2015). Understanding the influence of contextual factors on community reintegration among injured military service members. *Journal of Rehabilitation Research and Development*, 52(5), 527-542.
- Hawkins, B.L., McGuire, F.A., Britt, T.W., & Linder, S.M. (2015). Identifying the contextual influences of community reintegration among injured service members. *Journal of Rehabilitation Research and Development*, 52(2), 235-246.
- McGaha, J. & Linder, S.M. (2014). Determining teacher candidates' attitudes towards global-mindedness. *Action in Teacher Education*, 36(4), 305-321.
- Linder, S.M. (2014). Pirate problems to plunder. *Teaching Children Mathematics*, 21(1), 16-17.
- Simpson, A. & Linder, S.M. (2014). An examination of mathematics professional development opportunities in child care settings. *Early Childhood Education Journal*, 42(5), 335-342.
- Linder, S.M., Eckhoff, A., & Igo, L.B. (2013). Identifying influential facilitators of mathematics professional development: A survey analysis of elementary school teachers. *International Journal of Science and Mathematics Education*, 11(6), 1415-1435.
- Linder, S.M., Ramey, M.D., & Zambak, S. (2013). Predictors of success for school readiness: A selective review of the literature. *Early Childhood Research and Practice*, 15(1).
- Linder, S.M. & McGaha, J. (2013). Building on successes: Reflections from two approaches to study abroad for undergraduate and graduate students. *The Educational Forum*, 77(3), 379-389.
- Cribbs, J. & Linder, S.M. (2013). Teacher practices and hybrid space in a fifth- grade mathematics classroom. *The Mathematics Educator*, 22(2), 55-81.

- Linder, S.M. (2012). Building content and communities: Developing a shared sense of early childhood mathematics pedagogy. *Journal of Early Childhood Teacher Education*, 33, (2), 109-126.
- Linder, S.M. (2012). Interactive whiteboards in early childhood mathematics: Strategies for effective implementation in Pre-K-Grade 3. *Young Children*, 67(3), 26-35.
- McGaha, J. & Linder, S.M. (2012). The impact of studying abroad on male preservice teachers: A phenomenological investigation. *Multicultural Perspectives*, 14(3), 163-168.
- Moore, C. & Linder, S.M. (2012). Using dance to deepen student understanding of geometry. *Journal of Dance Education*, 12(3), 104-108.
- Linder, S.M. (2011). The facilitator's role in elementary mathematics professional development. *Mathematics Teacher Education and Development*, 13(4), 44-66.
- Linder, S.M., Powers-Costello, B., Stegelin, D. (2011). Mathematics in early childhood: Research-based rationale and practical strategies. *Early Childhood Education Journal*, 38(3), 165-170.
- Linder, S.M. (2010). A model of planning for mathematics instruction in the 21st century: Learning from the Reggio Emilia approach. *Teaching Children Mathematics*, 17(4), 249-254.

#### **Publications: National/International Refereed Book Chapters**

- Linder, S.M. (2018). Supporting Mathematics Play in Home Environments: A Feasibility Examination of a Take-Home Bag Intervention. In *Mathematical Learning and Cognition in Infancy and Early Childhood: Integrating Interdisciplinary Research into Practice*. Springer.
- Linder, S.M. & Simpson, A. (2018). Connecting the mathematics identity of early childhood educators to classroom experiences for young children. In *Forging connections in early mathematics teaching and learning*. Springer.
- Eckhoff, A. & Linder, S.M. (2018). Using observation to build STEAM Experiences. In A. Shillady & L. S. Muccio (Eds.), *Spotlight on young children*. Washington, DC: NAEYC.
- Deaton, C.M., Linder, S.M., Deaton, B. (2017). Piecing the puzzle together: Building a dialogue for engaging multiple disciplines in inquiry-based mobile learning through professional development. In *Mobile learning: Perspectives on practice and policy*. Information Age Publishing.
- Deaton, C.M., Linder, S.M. Deaton, B. (2018). Identifying effective uses of mobiles for encouraging 21st century skills. In *Handbook of Research on Mobile Technology, Constructivism and Meaningful Learning*. IGI Global.
- Gee, K., Martin, H., & Linder, S.M. (2017). Producers, consumers, and decomposers. *Council for Elementary Science International Sourcebook*.
- Linder, S.M. (2012). Interactive whiteboards in early childhood mathematics: Strategies for effective implementation in Pre-K-Grade 3. In A. Shillady & L. S. Muccio (Eds.), *Spotlight on young children and technology* (22-29). Washington, DC: NAEYC.
- Tyminski, A.M. & Linder, S.M. (2012). Encouraging preschoolers emerging mathematics skills. In A. Shillady (Ed.), *Spotlight on Young Children: Exploring Math* (28-33). Washington, D.C.: NAEYC.

### **Publications: Invited Articles and Book Chapters**

- Eckhoff, A. & Linder, S.M. (In Press). Breaking down STEAM for young children: Part four of a four-part series. *Teaching Young Children*, 14, (1).
- Linder, S.M. & Eckhoff, A. (2020). Breaking down STEAM for young children: Part three of a four-part series. *Teaching Young Children*, 13, (5), 26-29.
- Eckhoff, A. & Linder, S.M. (2020). Breaking down STEAM for young children: Part two of a four-part series. *Teaching Young Children*, 13 (4).
- Linder, S.M. & Eckhoff, A. (2020). Breaking down STEAM for young children: Part one of a four-part series. *Teaching Young Children*, 13, (3).
- Linder, S.M. (2017). Using Math Take-Home Bags to Support Family Math Play. *Teaching Young Children*, 11(1): 29–31.
- Eckhoff, A. & Linder, S.M. (2017). Using observation to build STEAM experiences. *Teaching Young Children*.
- Linder, S.M. (2017). *Research Brief: Early Childhood Mathematics Education*. Institute for Child Success: Greenville, SC.
- Linder, S.M. (2017). Book review: Cases for mathematics teacher educators: Facilitating conversations about inequities in mathematics classrooms. *Teachers College Record*, <http://www.tcrecord.org> ID Number: 21885.
- Linder, S.M. (2015). *Developmentally Appropriate Mathematics Instruction in Early Childhood Education*. Primrose Schools: Atlanta, GA.

### **Publications: Regional Referred Articles**

- Linder, S.M., Visser, R., Knapp, K., & Moede, K. (2014). Integrating interactive whiteboards in mathematics centers for young children. *The MathMate*, 36(2), 22-27.

### **Publications: Manuscripts Undergoing Refereed Review**

- Alston, D., Linder, S.M., High, K., & Lee, C. (Under Review). Towards an understanding for the need for holistic STEM faculty development: A systematic literature review.
- Walter, A.A., Van Puymbroeck, M., Townsend, J., Linder, S.M., & Schmid, A.A., (under review). Psychological and physical impacts of a therapeutic yoga program for informal caregivers: A mixed methods study.
- Hall, A., Gao, Q. Linder, S.M. (Under Review). Learning to teach during a global pandemic: examining student teachers' experiences with early school closures. *Dimensions of Early Childhood*.
- Johnson, F., Stecker, P., Linder, S.M. (Under Review). Instructional support for fact fluency among children with mathematics difficulties. In *Mathematical learning and cognition in middle childhood and early adolescence*.
- Hollis, M., Peavy, M., Evers, A., Poovey, J., & Linder, S.M. (Under Review). Creating empathetic learners: Using mathematics to address social emotional growth and connections to diversity for young children.
- Barnes, E., Barnes, J., Uhle, N., & Linder, S.M. (Under Review). Using mathematics to explore social inequities.
- Johnston, K. & Linder, S.M. (Under Review). Using the teaching pyramid observation tool to support professional development experiences in 4K settings.

- D'Amico, L.K. Fan, X., Linder, S.M., White, K.M., & Pawloski, T. (Under Review). Examining early childhood education through the lens of community stakeholders: A statewide needs assessment.
- Eckhoff, A. & Linder, S.M. (Under Review). STEAMing through COVID-19: Strategies for sustaining STEAM practices within the wake of the pandemic.
- Bharaj, P., Simpson, A., Linder, S.M., & Jacobson, E. (Under Review). Exploring the association of prospective teachers' beliefs about mathematics with their prior experiences as mathematics learners.
- Linder, S.M., D'Amico, L., & Fan, X. (Under Review). The role of teacher/child interaction assessments in supporting professional learning within 4K Settings.

### **Publications: National Curriculum**

- Linder, S.M. (2019). Reach Out and Read Carolinas early math training. Online course for Reach Out and Read Carolinas. Charlotte, NC.
- Trundle, K.C., Linder\*, S.M., Donovan, C., Sanders, S., & Bell, D. (2016). *Preschool Balanced Learning*®. Acworth, GA: Primrose Schools®. \*Linder was lead author on math section of the ten month curriculum.
- Trundle, K.C., Linder\*, S.M., Donovan, C., Sanders, S., & Bell, D. (2016). *Pre- Kindergarten Balanced Learning*®. Acworth, GA: Primrose Schools®. \*Linder was lead author on math section of the ten month curriculum.
- Gunderson, D.J., King, P.P., Linder, S.M., Moss, D.A., Moss, W.F., Pepin, G., & Schumpert, J. (2010). *Math out of the box student record book, developing algebraic thinking, grade K-5*. \* Carolina Biological Supply: Burlington, NC. \*Separate curriculum publication for each grade level (six total for algebraic thinking).
- Gunderson, D.J., King, P.P., Linder, S.M., Moss, D.A., Moss, W.F., Pepin, G., & Schumpert, J. (2010). *Math out of the box student record book, developing geometric logic, grade K-5*. \* Carolina Biological Supply: Burlington, NC. \*Separate curriculum publication for each grade level (six total for geometric logic).
- Gunderson, D.J., King, P.P., Linder, S.M., Moss, D.A., Moss, W.F., Pepin, G., & Schumpert, J. (2010). *Math out of the box student record book, developing measurement benchmarks, grade K-5*. \* Carolina Biological Supply: Burlington, NC. \*Separate curriculum publication for each grade level (six total for measurement benchmarks).
- Diaz, D.P., Gunderson, D.J., King, P.P., Lashley, E.L., Linder, S.M., Moss, D.A., Moss, W.F., & Schumpert, J. (2009). *Math out of the box, developing number concepts: Grade K. Kit A*. Carolina Biological Supply: Burlington, NC.
- Diaz, D.P., Gunderson, D.J., King, P.P., Lashley, E.L., Linder, S.M., Moss, D.A., Moss, W.F., & Schumpert, J. (2009). *Math out of the box, developing number concepts: Grade K: Kit B*. Carolina Biological Supply: Burlington, NC.
- Diaz, D.P., Gunderson, D.J., King, P.P., Lashley, E.L., Linder, S.M., Moss, D.A., Moss, W.F., & Schumpert, J. (2009). *Math out of the box, developing number concepts: Grade 5: Kit A*. Carolina Biological Supply: Burlington, NC.

### **Publications: Other Non-Refereed**

- D'Amico, L., Linder, S.M. Mayer-White, K., Polokowski, T., & Fan, X. (2019). *South Carolina preschool development grant needs assessment*. South Carolina Department of Social Service/South Carolina First Steps.

- D'Amico, L., Linder, S.M. Fan, X. (2019). *South Carolina community block grants for education pilot program evaluation report 2015-2016*. Evaluation commissioned by the South Carolina Education Oversight Committee.
- D'Amico, L., Linder, S.M. Cain, J.M., Brown, W., Greer, F., & Moon, A. (2018). *South Carolina community block grants for education pilot program evaluation report 2016-2017*. Evaluation commissioned by the South Carolina Education Oversight Committee.
- D'Amico, L., Linder, S.M. Cain, J.M., Brown, W., Greer, F., & Moon, A. (2017). *South Carolina community block grants for education pilot program evaluation report 2015-2016*. Evaluation commissioned by the South Carolina Education Oversight Committee.
- Linder, S.M., Ramey, M.D., & Zambak, S. (2011). *Predictors of success for school readiness and later school achievement: A selective review of the literature*. South Carolina First Steps: Greenville, SC.

### **Presentations: Refereed National/International Conference Papers**

- Linder, S.M. (2019). *Leveraging early field experiences to support enactment of effective mathematics instruction*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators. Nashville, TN.
- Gao, Q., Hall, A., & Linder, S.M. (2019). *Alternative practicum experiences for early childhood preservice teachers*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators. Nashville, TN.
- Walter, A.A., Van Puymbroeck, M., Townsend, J., Linder, S.M., & Schmid, A.A. (2018). *A mixed methods study on therapeutic yoga for informal caregivers*. Paper presented at the American Therapeutic Recreation Association Research Institute. Grand Rapids, MI.
- Lee, C.M., High, K.A., Linder, S.M., & Stefl, S. (2018). *Holistic STEM faculty development*. Paper presented at the annual meeting of the National Association for Research in Science Teaching. Atlanta, GA.
- Alston, D.M., Linder, S., Lee, C., & High, K. (2018). *Towards an Understanding of the Need for Holistic STEM Faculty Development A Systematic Literature Review*. Paper presentation at the Association of Science Teacher Education. Baltimore, MD.
- Stefl, S.K., Martin, J.P., Lee, C.M., Linder, S.M., and High, K.A. (2017). *Special session: STEM faculty development research agenda*. Paper presented at the annual meeting of the IEEE Frontiers in Education Conference (FIE), Indianapolis, IN.
- Walter, A.A., Van Puymbroeck, M., Townsend, J., Linder, S.M., & Schmid, A.A. (2017). *Complementary alternative medicine for informal caregivers: A systematic review*. Paper presented at the annual meeting of the American Therapeutic Recreation Association Research Institute. Orlando, FL.
- Lee, D.M., Stefl, S.K., Linder, S.M., Lee, C.M., Jamil, F.M., High, K.A. (2017). *How many hats do you wear: Building research capacity for STEM faculty development workshop*. Paper presented and included in Proceedings of the 2017 American Society for Engineering Education Annual Conference and Exhibition. Columbus, OH.
- Linder, S.M. & Simpson, A. (2016). *Examining the effects of mathematics professional development in child care settings*. Paper presented at the annual meeting of the American Educational Research Association. Washington, D.C.
- Emerson, A. & Linder, S.M. (2016). *What survives the flight home? A review of research of the Reggio Inspired approach*. Paper presented at the annual meeting of the American Educational Research Association. Washington, D.C.

- Linder, S.M. (2015). *Examining changes in mathematical practices for Head Start and Early Head Start teachers*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators. Orlando, FL.
- Simpson, A. & Linder, S.M. (2015). *The indirect effect of children's gender on early childhood educators' mathematical talk*. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.
- Linder, S.M. & Simpson, A. (2014). *Is it enough? Examining opportunities for early childhood educators to engage in mathematics professional development*. Paper presented at the annual meeting of the American Educational Research Association. Philadelphia, PA.
- Linder, S.M., Rembert, K., Simpson, A., & Ramey, M.D. (2014). *Recipient perceptions of early childhood professional development*. Paper presented at the annual meeting of the American Educational Research Association. Philadelphia, PA.
- Linder, S.M. & Simpson, A. (2013). *Student teaching experiences and early childhood mathematics pedagogical beliefs: Identifying barriers to success*. Paper presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.
- Linder, S.M., Rembert, K., Simpson, A., & Ramey, M.D. (2013). *Investigating facilitator perceptions of quality and impact of early childhood professional development*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators, Washington, D.C.
- Linder, S.M. & Simpson, A. (2013). *Investigating the influence of early childhood student teaching experiences on mathematics pedagogical beliefs*. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.
- Linder, S.M. & Simpson, A. (2012). *Examining changes in preservice teacher beliefs relating to early childhood mathematics pedagogy as a result of student teaching*. Paper presented at the annual meeting of the National Association of Early Childhood Teacher Educators. Atlanta, GA.
- Linder, S.M. & Smart, J.B. (2012). *Development, validation, and implementation of the Elementary Mathematics Motivation Inventory (EMMI)*. Paper presented at the annual meeting of the American Educational Research Association. Vancouver, Canada.
- McGaha, J. & Linder, S.M. (2012). *The impact of studying abroad on male preservice teachers: A phenomenological investigation*. Paper presented at the annual meeting of the American Educational Research Association. Vancouver, Canada.
- Linder, S.M. (2011). *Building content and communities: Developing a shared sense of elementary mathematics content and pedagogy with grade level teams*. Paper presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- Cribbs, J. & Linder, S.M. (2011). *Investigating a 5th grade mathematics teacher's practices in relation to hybrid spaces*. Paper presented at the 33rd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Reno, NV.
- Linder, S.M., Smart, J.B., & Cribbs J. (2011). *Exploring student motivation for mathematics in an elementary setting*. Paper presented at the annual meeting of the American Educational Research Association. New Orleans, LA.
- Linder, S.M. & Smart, J.B. (2010). *Examining motivational constructs in mathematics for students across elementary grades*. Paper presented at the 32nd annual meeting of the



North American Chapter of the International Group for the Psychology of Mathematics Education. Columbus, Ohio.

Linder, S.M. (2010). *A mixed methods investigation identifying characteristics of influential facilitators of elementary mathematics professional development*. Paper presented at the 32nd annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Columbus, Ohio.

Linder, S.M. (2010). *A mixed methods investigation: Implications for the instrument development model*. Paper presented at the annual meeting of the American Educational Research Association. Denver, CO.

### **Presentations: Refereed National/International Conference Posters, and Workshops**

D'Amico, L., Linder, S.M. X (2020). Conducting high-quality, multifaceted needs assessments with the intent of shaping program development, implementation, and evaluation. American Educational Association.

Linder, S.M., Ruiz, Y., Gao, Q. & Bennett, A. (2019). *Project MathPack: Examining family mathematical play patterns and their influence on parent beliefs and children's mathematical understandings*. Presented at the annual meeting of the Promising Math conference. The Erikson Institute, Chicago, IL.

D'Amico, L., Ward, B., Creech, F., Folsom, W., Manoski, B., & Linder, S.M. (2019). *Using teacher/child interaction assessments to examine the success of professional development: The stories of four school district 4K initiatives*. Presented at the annual meeting of the National Association for the Education of Young Children. Nashville, TN.

Linder, S.M. (2019). *Creating substantive early field experiences to support instructional practice in early childhood mathematics*. Presented at the annual meeting for the Association of Mathematics Teacher Educators. Orlando, FL.

Linder, S.M. (2018). Supporting mathematical play in home *environments*. Presented at the Research Pre-session of the National Council of Teachers of Mathematics. Washington, DC.

Linder, S.M. & Emerson, A. (2017). *Supporting family mathematics engagement through non-intrusive techniques*. Presented at the annual meeting of the National Association for the Education of Young Children. Atlanta, GA.

Emerson, A., Clay, K., Gerland, T. & Linder, S.M. (2017). *Promoting preschooler's approaches to learning through play: Intentional toy and task selection for early childhood classrooms*. Poster presented at the annual meeting of the National Association for the Education of Young Children. Atlanta, GA.

Linder, S.M. & Deaton, C.M. (2017). *Creativity, communication, and connections: Engaging in STEM with young children*. Presented at the annual meeting of the National Youth-at-Risk Conference. Savannah, GA.

Deaton, B., Deaton, C.M., & Linder, S.M. (2017). *Examining inquiry-based mobile learning for multiple disciplines and grade levels*. Poster presented at the annual meeting of the American Educational Research Association. San Antonio, TX.

Linder, S.M., Emerson, A., Hubbard, K., & Taylor, C. (2015). *Examining the teacher's role during center time: How to maximize collaboration, communication, and engagement through play*. Presented at the annual meeting of the National Association for the Education of Young Children. Orlando, FL.

- Linder, S.M. & Simpson, A. (2015). *Connecting methods courses and practicum experiences in early childhood mathematics*. Presented at the annual meeting of the Association of Mathematics Teacher Educators. Orlando, FL.
- Simpson, A. & Linder, S.M. (2013). *Investigating providers and recipients perceptions of early childhood professional development in mathematics*. Poster presented at the annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, Chicago, IL.
- Linder, S.M. (2013). *Exploring changes in early childhood mathematics pedagogical beliefs within the context of a methods course*. Poster presented at the annual meeting of the National Association of Early Childhood Teacher Educators, Washington, D.C.
- Linder, S.M. & Simpson, A. (2013). *Mathematics pedagogical beliefs and early childhood student teaching*. Poster presented at the annual Research Pre-session of the National Council of Teachers of Mathematics. Denver, CO.
- Linder, S.M., Rembert, K., Simpson, A., Ramey, M.D., Brown, B., D'Amico, L., & Miller, K. (2013). *Examining professional development for the early care workforce: A multiphase mixed methods exploration*. Poster presented at the annual meeting of the American Educational Research Association. San Francisco, CA.
- Linder, S.M. (2010). *Exploring teacher perceptions of influential facilitators of elementary mathematics professional development: A mixed methods investigation*. Poster presented at the annual meeting of the American Educational Research Association. Denver, CO.
- Linder, S.M. & Smart, J. (2010). *An investigation of motivational constructs in mathematics*. Poster presented at the annual meeting Research Pre-session of the National Council of Teachers of Mathematics. San Diego, CA.
- Pepin, G. & Linder, S.M. (2010). *Connecting science and math inquiry at the early childhood level*. Presented at the annual meeting of the National Council of Teachers of Mathematics. San Diego, CA.
- Linder, S.M. (2010). *Examining the role of the facilitator in motivating teachers during elementary mathematics professional development*. Presented at the annual meeting of the Association of Mathematics Teacher Educators. Irvine, CA.

### **Presentations: Keynote and Invited Sessions**

- Hall, A. & Linder, S.M. (2019). *Building bridges between home and school*. Invited talk to the Primrose Early Learning Council. Atlanta, GA.
- Linder, S.M. (2018). *STEM, STEAM, STREAM. So many acronyms, which one is for you?* Keynote talk for the North Carolina Council of Teachers of Mathematics. Greensboro, NC.
- Linder, S.M. (2018). *Supporting mathematics interactions in home environments: Strategies for connecting with families*. Keynote talk for the North Carolina Council of Teachers of Mathematics, Greensboro, NC.
- Linder, S.M. (2018). *Strengthening early mathematics instruction*. Keynote talk for Strengthening Early Math and Literacy Instruction in North Carolina, a joint meeting of SAS and the SKEEBO Foundation. Charlotte, NC.
- D'Amico, L. & Linder, S.M. (2018). *Evaluation report for South Carolina community block grants for education pilot program evaluation report 2016-2017*. Invited presentation to the South Carolina Education Oversight Committee. Columbia, SC.

- Linder, S.M. (2018). *Early childhood math: Building 21st century learners*. Invited presentation for the South Carolina Department of Education (done five times for school district personnel across the state).
- Linder, S.M. (2017). *Every child is a mathematician*. Keynote talk for the Making it Count: Early Math in the Classroom and Community Summit hosted by the Institute for Child Success. Columbia, SC.
- Linder, S.M. (2017). *Understanding STEM practices to better support 21st century learners*. Panel discussion for the First Steps South Carolina Chairman's Summit on Early Childhood. Columbia, SC.
- D'Amico, L. & Linder, S.M. (2017). *Evaluation report for South Carolina community block grants for education pilot program evaluation report 2015-2016*. Invited presentation to the South Carolina Education Oversight Committee. Columbia, SC.
- Linder, S.M. (2017). *Setting the stage: Supporting prekindergarten mathematics environments*. Invited talk to the Community Block Grant Evaluation Team, South Carolina Education Oversight Committee. Columbia, SC.
- Linder, S.M. (2016). *Early childhood mathematics: Processes of learning*. Invited talk to the Community Block Grant Evaluation Team, South Carolina Education Oversight Committee. Columbia, SC.
- Linder, S.M. (2015). *Examining cognitive skills for school readiness*. Invited presentation to the South Carolina Department of Education: Assessment Oversight Committee. Columbia, SC.
- Linder, S.M. (2015). *Moving towards a framework for mixing within mixed methods research*. Invited lecture for the Department of Engineering and Science Education. Clemson University. Clemson, SC.
- Linder, S.M. & Moss, D. (2010). *Working with the ASSET foundation*. Invited talk for Carolina Biological Supply. Burlington, NC.

### **Presentations: Regional/State Conferences and Professional Development**

- Linder, S.M. (2018-2021). Building early mathematics success. Chesterfield, SC (ongoing professional development sessions with 4K and 5K for three years/35 sessions)
- Linder, S.M. (2020). 4K mathematics curriculum development, Richland 1, SC (ongoing sessions for four months, 7 sessions)
- Linder, S.M. (2020). Building early mathematics success. Lancaster, SC (ongoing professional development sessions with 5K for one year/10 sessions)
- Linder, S.M. (2020) Building early mathematics success. York, SC (ongoing professional development sessions with 4K for one year/10 sessions)
- Linder, S.M. (2018). *Preschool development grant: Regional needs assessment meeting*. Greenville, Anderson, and Spartanburg Counties, SC. (3 sessions).
- Linder, S.M. (2018). *Early childhood math: Building 21st century learners*. Spartanburg School Districts 3 and 7. Spartanburg, SC.
- Linder, S.M. (2018). *Supporting engineering across the curriculum*. AJ Whittenberg Elementary School. Greenville, SC. (5 sessions)
- Linder, S.M (2018). *Building environments for early mathematics success*. Greenwood 50 School District. Greenwood, SC.
- Linder, S.M. (2018). *Building environments for early mathematics success*. Oconee County School District. Seneca, SC.

- Linder, S.M. (2017). *Early childhood environments: Examining settings for young children*. Spartanburg 7 School District. Spartanburg, SC.
- Linder, S.M. (2017). *Math for young children: Moving past counting*. Cherokee School District. Gaffney, SC.
- Linder, S.M. (2017). *Early childhood growth and development: Ensuring school readiness success*. Cherokee School District. Gaffney, SC.
- Linder, S.M. (2016). *Math for young children: Moving past counting*. 7 Shares Professional Development Conference. Spartanburg, SC.
- Linder, S.M. (2016). *Early childhood STEM: Connecting the processes of learning*. 7 Shares Professional Development Conference. Spartanburg, SC.
- Linder, S.M. (2015). *Moving Past Counting. Presented at the inaugural STEAM Early Childhood Conference*. Clemson University, Clemson, SC.
- Linder, S.M. & Schumpert, J. (2015). *Project BEEMS: Building Environments for Early Mathematics Success, Day 3*. Seneca, Greenville, and Anderson Head Starts, SC. (3 sessions).
- Linder, S.M. (2014). *Project BEEMS: Building Environments for Early Mathematics Success, Day 2*. Seneca, Greenville, and Anderson Head Starts, SC. (3 sessions).
- Linder, S.M. (2013). *Project BEEMS: Building Environments for Early Mathematics Success, Day 1*. Seneca, Greenville, and Anderson Head Starts, SC. (3 sessions).
- Linder, S.M. (2010). *Developing number sense at the early childhood level*. Presented at the South Carolina Association for the Education of Young Children. Columbia, SC.
- Linder, S.M. (2010). *Developing number sense at the early childhood level*. Clemson University Early Childhood Professional Development Conference. Clemson, SC.

## **Grantsmanship**

### **Grant Projects: Externally Funded (Federal, National, State)**

- Storybook Structures Curriculum. Funding Agency: NASA. Co-Principal Investigator, \$4000 (2021-2022)
- Project MathPack: Supporting Family Mathematical Interactions. Funding Agency: SKEEBO Foundation. Principal Investigator, \$75,000 (2018- 2019)
- Community Block Grants Pilot Program Evaluation Year 3. Funding Agency: South Carolina Education Oversight Committee. Principal Investigator, \$41,390 (2018-2019)
- Community Block Grants Pilot Program Evaluation Year 2 (subcontract with the University of South Carolina). Funding Agency: South Carolina Education Oversight Committee. Co-Principal Investigator (Principal Investigator on Clemson subcontract), \$35,000 (for Clemson subcontract)/\$83,938 for total award (2017-2018)
- Building Research Capacity for STEM Faculty Development. Funding Agency: National Science Foundation. Co-Principal Investigator, \$99,944 (2017- 2019)
- Community Block Grants Pilot Program Evaluation (subcontract with the University of South Carolina). Funding Agency: South Carolina Education Oversight Committee. Co-Principal Investigator (Principal Investigator on Clemson subcontract), \$34,916 (for Clemson subcontract)/\$83,938 for total award (2016-2017)
- Building Environments for Early Mathematics Success. Funding Agency: PNC Bank Foundation. Principal Investigator, \$50,000 (2015-2016)

Center of Excellence for Mobile Learning (Research Subaward). Funding Agency: South Carolina Commission on Higher Education. Co-Principal Investigator, \$16,000 (2015-2016)

Building Environments for Early Mathematics Success. Funding Agency: PNC Bank Foundation. Principal Investigator, \$45,000 (2013-2014)

Assessing the Landscape of Early Childhood Professional Development in South Carolina. Funding Agency: South Carolina Early Childhood Advisory Council (First Steps, SC). Principal Investigator, \$100,000 (2011-2012)

Developing Community Indicators of School Readiness and South Carolina School Readiness Index: Collaborative Proposal to South Carolina First Steps. Funding Agency: South Carolina Early Childhood Advisory Council (First Steps, SC). Co-Principal Investigator, \$80,000 (2011-2012)

Identifying Predictors of Success for School Readiness. Funding Agency: First Steps, SC. Principal Investigator, \$12,000 (2011)

Professional Development for Integrated Inquiry (PDI2): Spartanburg District 7 Partnership. Funding Agency: South Carolina Department of Education. Co-Principal Investigator, \$60,000 (2010-2014)

Professional Development for Integrated Inquiry (PDI2): Orangeburg District 4 Partnership. Funding Agency: South Carolina Department of Education. Co-Principal Investigator, \$30,000 (2010-2011)

Professional Development for Integrated Inquiry (PDI2): Marion District 7 Partnership. Funding Agency: South Carolina Department of Education. Co-Principal Investigator, \$15,000 (2010-2011)

Professional Development for Integrated Inquiry (PDI2): Orangeburg District 3 Partnership. Funding Agency: South Carolina Department of Education Co-Principal Investigator, \$58,500 (2010-2013)

### **Grant Projects: Internally Funded**

CU SUCCEEDS: STEM Faculty Development Research Initiative. Funding Agency: Clemson University. Co-Principal Investigator, \$30,866 (2021-2022)

The Capable, Competent Child. Funding Agency: Clemson University, College of Education (ADR Funding). Co-Principal Investigator, \$14,608 (2019- 2020)

Examining and Refining an Early Childhood Math Bag Intervention to Increase Parent and Child Mathematics Play Interactions. Funding Agency: Clemson University, Clemson Support for Early Exploration and Development (SEED) Program (Tier 2). Principal Investigator, \$10,000 (2017-2018)

Investigating STEM Faculty Development (TIGER grant). Funding Agency: Clemson University, College of Engineering and Science. Co-Principal Investigator, \$15,275 (2016-2017)

Writing Mathematics Word Problems for Early Childhood and Elementary Classrooms (Creative Inquiry). Funding Agency: Clemson University Principal Investigator, \$6000 (2014-2016)

Improving Mathematics Environments for Young Children (Creative Inquiry). Funding Agency: Clemson University. Principal Investigator, \$6000 (2014-2016)

Clemson University Summer Institute for Online Education. Funding Agency: Clemson University. Co-Principal Investigator, \$9,000 (2014)

Examining Preservice and Inservice Teacher Beliefs Relating to Mathematics Pedagogy: A Longitudinal Study. Funding Agency: Clemson University's School of Education: A4 Collaborative Research Grant Program. Principal Investigator, \$10,000 (2010-2012)

### **Honors and Awards**

Junior Researcher of the Year, Clemson University College of Education, 2019  
Junior Research of the Year Nominee, Clemson University, 2019  
Professor of the Game, Clemson University, 2018

### **Teaching and Advising**

#### **Courses Taught (Clemson University)**

EDEC 4300: Early Childhood Methods in Mathematics Teaching  
EDEC 4200: Early Childhood Methods in Science Teaching  
EDEL 4520: Elementary Methods in Mathematics Teaching  
EDEC 4840: Early Childhood Supervision of Student Teachers  
EDEC 3000: Foundations of Early Childhood Education  
EDEC 2200: Family, School and Community Relationships in Early Childhood  
EDEC 3970: Creative Inquiry in Education  
EDEC 8100: Foundations of Early Childhood Education (online)  
EDEC 8950: Integrating Math, Science, and Technology into Early Childhood Inclusive Settings (Masters and Doctoral level) (Online)  
EDEC 8900: Assessment and Program Planning in Early Childhood (Masters and Doctoral)  
EDEC 8300: Early Childhood Practicum (Online)  
EDEC 9100: Foundations of Early Childhood Education (Doctoral)  
EDF 9720: Grounded Theory/Phenomenology Research Methods (Doctoral)  
ED 9750: Mixed Methods Research (Doctoral)

#### **Doctoral Advising: Chair**

Andrea Emerson (Ph.D. Curriculum and Instruction- Ph.D. 2018)  
Deanna Ramey (Ph.D. Curriculum and Instruction- Ph.D. 2018)  
Amaris Tejada (Ph.D. Curriculum and Instruction- Ph.D. 2020)  
Brittany Sammons (Ph.D. Curriculum and Instruction, Coursework in Progress)

#### **Doctoral Advising: Committee Member (Content Expert/Methodology)**

Tracy Manieri (Ph.D. PRTM- Ph.D., 2012)  
Brent Hawkins (Ph.D. PRTM- Ph.D., 2013)  
Brandi Crowe (Ph.D. PRTM- Ph.D., 2013)  
Heather McCrea (Ph.D. Curriculum and Instruction- Ph.D., 2014)  
Cindy Hartman (Ph.D. PRTM- Ph.D., 2015)  
Courtney Faber (Ph.D. Engineering and Science Education-Ph.D., 2015)  
Dennis Kombe (Ph.D. Curriculum and Instruction- Ph.D., 2016)  
Gustavo Moran Soto (Ph.D. Engineering and Science Education, Ph.D., 2016)  
Rachael Huber (Ph.D. Language, Literacy, Culture- Ph.D., 2017)  
Julie Desmangles (Ph.D. Educational Leadership- Ph.D., 2017)

Candice Moore (Ph.D. Curriculum and Instruction- Ph.D., 2018)  
 Alysha Walter, (Ph.D. PRTM- Ph.D., 2018)  
 Catherine McGough, (Ph.D. Engineering and Science Education- Ph.D., 2019)  
 Xiaotong Liu (Ph.D. Planning Development Built Environment- Ph.D., 2020)  
 Friggita Johnson (Ph.D. Special Education- Ph.D., 2020)  
 Qianyi Gao (Ph.D. Curriculum and Instruction- Ph.D. 2021)  
 Amanda Bennett (Ph.D. Learning Sciences- Ph.D. 2021)  
 Keith Johnston (Ph.D. Curriculum and Instruction, Coursework in Progress)

## **Service**

### **Service to the Field of Scholarship**

2020-Present Editorial Board Member, Investigations in Mathematics Learning  
 2016-Present Section Editor (STEAM for Young Children), *Teaching Young Children*  
 2015-Present Section Editor (Growing in STEM), *Young Children*  
 2015 Section Editor (Math by the Month), *Teaching Children Mathematics*  
 2012-Present Consulting Editor, *Young Children*  
 2012-Present Guest Reviewer, *Mathematics Teacher Education and Development*  
 2011-Present Guest Reviewer, *Journal for Research in Mathematics Education*  
 2011-Present Guest Reviewer, *Early Childhood Education Journal*  
 2011-Present Guest Reviewer, *Journal of Early Childhood Teacher Education*

### **Service to the Profession**

2020 Advisory Member, Instruction Subcommittee, AccelerateED Taskforce (in conjunction with AccelerateSC Task Force for COVID-19)  
 2017-Present Advisory Board Member, Tri County Technical College  
 2015-Present Advisory Board member, Primrose Child Care Franchise  
 2012-2015 Board Member, Greenville First Steps, SC  
 2010-2012 Treasurer, South Carolina Association of Early Childhood Teacher Educators

### **Other National, State, and Regional Service**

2021-Present Member and Project Lead of Revised Needs Assessment, Institute of Higher Education Collaborative Team, Preschool Development Grant Project, SC First Steps and SC DSS  
 2019-2020 Member and Project Lead of Initial Needs Assessment, Institute of Higher Education Collaborative Team, Preschool Development Grant Project, SC First Steps and SC DSS  
 2020-2021 Guest Speaker, three sessions on Mixed Methods Research for doctoral students in Engineering and Science Education, Clemson University  
 2020 Consultant and Curriculum Writer, 4K Curriculum Development, Richland School District 1, SC  
 2016-2020 Guest Teacher (small group K-1 math lessons), Clemson Elementary School  
 2015-2016 Member, Center for Childhood Learning and Development (CLAD Lab), Clemson University

2010-2011 Leadership team member of ASSET 4 Math, an extension of the Achieving Student Success through Excellence in Teaching (ASSET) nonprofit organization: Pittsburg, PA

### **Professional Service (University Level)**

2021-Present Member: Clemson University Commission on Women  
2021-Present Member: Clemson University Commission on Women (Advocacy Subcommittee)  
2021-Present Member: University Mentor Committee  
2019-Present Member: Child Care Committee for Implementation and Evaluation  
2019-Present Member: Child Care Subcommittee: Naming Process  
2019-2020 Lead Senator: Clemson University Faculty Senate  
2019-2020 Member: Faculty Senate Advisory Board  
2019-2020 Member: Faculty Senate Subcommittee  
2019-2020 Search Committee Member: Clemson University Child Care Provider  
2017-2020 Search Committee Member: Child Care Architect/Contractor  
2017-Present Member: Academic Integrity Committee  
2017-2018 Member: Summer Reading Advisory Committee  
2015-2017 Chair: Support Services, Training, and Mentoring Subcommittee for the President's Commission on Women, Clemson University  
2015-2016 Alternate: Clemson University Faculty Senate  
2014-2017 Member of President's Commission on Women, Clemson University (Nominated Position)  
2014-2016 Member: University Child Care Center Committee  
2014-2015 Member: University Undergraduate Curriculum Committee  
2010-2015 Member: Clemson University Parking Committee

### **Professional Service (College and Department Level)**

2021-Present Member: T & L Tenure, Promotion, and Retention Committee  
2021-Present Chair: T & L TPR Committee, Full Professor Review  
2021-Present Member: T & L Post Tenure and Retention Committee  
2020-Present Member, Continuous Improvement Committee  
2021 Member, CAEP Site Visit Committee  
2018-Present Member: Ad Hoc Committee on M.Ed. Scholarships and Awards  
2020-2021 Search Committee Member: Associate Professor of Quantitative Methodology  
2019-2020 Search Committee Chair: Associate Professors of Science Education (2 positions)  
2019-2020 Search Committee Member: Assistant Professor of Elementary Education  
2019-2020 Search Committee Member: Lecturer of Early Childhood Education  
2019-2020 Search Committee Member: Clinical Assistant Professor of Field Experiences  
2018-2020 Coordinator: Early Childhood Education  
2018-2019 Search Committee Member: Assistant Professor of Quantitative Methodology  
2018-2019 Faculty Mentor: Jill Shelnut, Lecturer of Early Childhood Education  
2018-2019 Faculty Mentor: Jennifer Schumpert, Lecturer of Early Childhood Education  
2017-2020 Member: Teaching and Learning Tenure and Promotion Committee  
2017-2018 Chair: College of Education Elections Committee  
2017-2018 Chair: Teaching and Learning Departmental Advisory Committee  
2017-2018 Chair: Teaching and Learning Elections Committee



2017-2018 Search Committee Chair: Lecturer of Early Childhood Education  
 2017-2018 Search Committee Member: Lecturer of Early/Elementary Field Experiences  
 2017-2018 Search Committee Member: Lecturer of Secondary Field Experiences  
 2016-2019 Member: College of Education Academic Integrity Committee  
 2016-2017 Member: Doctoral Advisory Committee  
 2015-2017 Member: Collaborative Research Group: College of Education and College of Engineering and Science  
 2015-2017 Member: Ad Hoc Committee on Merit Pay  
 2015-2017 Co-Chair: Teaching and Learning Elections Committee  
 2016-2017 Member: Ad Hoc Committee on Teaching and Learning Bylaws  
 2015-2017 Member: Ad Hoc Committee on M.Ed. Programming  
 2015-2016 Member: Ad Hoc Committee Student Teaching Receptions  
 2014-2016 Member: Ad Hoc Committee on Curriculum Development: ECE/ELE 5 year  
 2014 Ad Hoc Committee Member: Review of Field Experiences for Education Students  
 2014 Ad Hoc Committee Member: Research Support in the School of Education  
 2012-2014 Coordinator: Early Childhood Education  
 2012-2014 Council Member: School of Education Advisory Council  
 2012 Search Committee Chair: Assistant/Associate of Early Childhood  
 2012 Search Committee Chair: Assistant Professor of Early Childhood  
 2012 Search Committee Member: Assistant Professor of Arts and Creativity  
 2012 Faculty Mentor for Alison Leonard (Assistant Professor: Elementary Education)  
 2010-Present Member: Early Childhood NAEYC/SPA Accreditation Program Report Writing Committee  
 2010-2017 Faculty Co-Advisor: SCAEYC Student Organization  
 2010-2015 Member: School of Education Curriculum Committee  
 2010 Search Committee Member: Department Chair of Teacher Education  
 2010 Section Committee Member: HEHD Awards of Excellence  
 2010 Member: Early Childhood Development Interdisciplinary Initiative Committee  
 2010 Member: Early Childhood and Elementary Practicum Placement Committee  
 2010 Early Childhood Education Graduate Independent Study Supervisor

### **Professional Affiliations**

American Educational Research Association (AERA) Division K- Teacher Education  
 SIG- Research in Mathematics Education SIG- Early Childhood Education  
 National Council of Teachers of Mathematics (NCTM)  
 South Carolina Council of Teachers of Mathematics (SCCTM)  
 North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)  
 Association of Mathematics Teacher Educators (AMTE)  
 South Carolina Association of Mathematics Teacher Educators (SCAMTE)  
 National Association of Early Childhood Teacher Educators (NAECTE)  
 South Carolina Association of Early Childhood Teacher Educators (SCAECTE)  
 National Association for the Education of Young Children (NAEYC)