

# MELTEM ALEMDAR, PH.D.

PRINCIPAL RESEARCH  
SCIENTIST

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📍 241 East Lake Dr., Decatur, GA 30030

## EDUCATION

**Georgia State University**      *Atlanta, Georgia*

*May 2009*

Doctor of Philosophy

Concentration: Research, Measurement & Statistics

Dissertation: *A Monte Carlo Study: The impact of missing data in cross-classified random effect models.*

*May 2009*

Certification in Public Health

*May 2003*

Master of Science

Major: Educational Research

**University of Hacettepe**      *Ankara, Turkey*

*June 1999*

Bachelor of Science

Testing, Measurement and Evaluation in Education

Concentration/Certification: Mathematics Education

## PROFILE

- Highly skilled in leading and executing complex and multi-disciplinary projects at all organizational levels
- Proven leader in STEM education research and evaluation
- Proven leader with the ability to identify and capitalize on individual strengths, motivate teams and implement vision to achieve goals on a local and national level

## SELECT ACCOMPLISHMENTS

- Led the **establishment of Education Research and Evaluation Group** to cement Georgia Tech's position as an important community partner in K-12 education policy and reform efforts and studying undergraduate education by encouraging the development of knowledge and expertise in evidence-based decision-making using the platforms of advanced qualitative and quantitative research methods
- Expanded Georgia Tech's involvement in Georgia K-12 education and has become a **major partner with the Georgia Department of Education** (GaDOE) in conducting research at a statewide level
- Key leader in building capacity at Georgia Tech for **rigorous education research and program evaluation** relating to K-12 and undergraduate STEM education
- Led efforts to **enhance the quality of STEM education** by development, implementation and research of innovative STEM curricula
- Principal investigator and co-Principal investigator on **ten major NSF grants**
- External **evaluator for 50+ evaluation projects** related to undergraduate and K12 education.
- Member of **Advisory Boards on STEM research studies** (NSF Noyce, NSF DRK-12, NSF ITEST, NSF IUSE)
- Invited **Keynote Speaker** at NSF 2019 Noyce Summit
- Served at **STEM Education 2026 Working Group** (NSF funded)

# PROFESSIONAL EXPERIENCE

## **Associate Director for Education Research and Evaluation Principal Research Scientist**

*July 2020 - Present*

Georgia Institute of Technology

Center for Education Integrating Science, Math and Computing (CEISMC)

Dr. Alemdar's responsibilities include collaborating with external partners at the local and international level to pursue partnership and research/evaluation opportunities. She leads the development of STEM grant proposals at CEISMC, including the management and delivery of project outcomes. She manages 12 research faculty, and over 15 undergraduate and graduate students. Since coming to Georgia Tech in 2009, Dr. Alemdar has been a key leader building capacity at the university for conducting rigorous education research and program evaluation of K-12 and higher education, which is critical for the university as it increases its institutional participation in the field of education policy and research. The establishment of Educational Research and Evaluation Group by Dr. Alemdar at CEISMC helped to cement Georgia Tech's position as an important community partner in education policy and reform efforts by encouraging the development of knowledge and expertise in evidence-based decision-making using the platforms of qualitative and quantitative research methods. Dr. Alemdar's research focuses on improving STEM education through research on curriculum development, teacher professional development, and student learning in integrated STEM environments. Dr. Alemdar is currently PI and co-PI for research on various NSF funded projects. In addition, she has been external evaluator for various NSF Projects over the past decade. Her expertise includes program evaluation, social network analysis and quantitative methods such as Hierarchical Linear Modeling, and Structure Equation Modeling. Currently, she is PI and co-PI on 5 NSF projects (\$8M+ in funding).

## **Associate Director for Educational Research and Evaluation/Senior Research Scientist**

*Oct 2016 - June 2020*

Georgia Institute of Technology CEISMC

## **Assistant Director for Educational Research and Evaluation/Senior Research Scientist**

*July 2015 - Sept 2016*

Georgia Institute of Technology CEISMC

## **Assistant Director for Educational Research and Evaluation/ Research Scientist II**

*July 2011 - July 2015*

Georgia Institute of Technology CEISMC

## **Research Scientist II**

*Sept 2009 - July 2011*

Georgia Institute of Technology CEISMC

## **Senior Research Associate**

*Jan 2009 - July 2009*

Georgia State University, Institute of Public Health

## **Program Evaluation Research Associate**

*2008 - 2009*

Georgia State University, Department of Education Policy Studies

## **Graduate Research Assistant**

*2003 - 2008*

Georgia State University, Department of Education Policy Studies

## **Teaching Assistant**

*2005 - 2006*

Georgia State University, Department of Education Policy Studies

**Senior Graduate Student Researcher**

Georgia Professional Standards Commission

2002 - 2004

**Testing Coordinator**

University of Hacettepe, Ankara, Turkey

1999-2000

**Primary School Teacher, Mathematics**

Ankara, Turkey

1999 - 2000

## SELECT EXTERNAL FUNDING (*CURRENT & PAST*)

### **NSF Noyce** (*Role: Principal Investigator*)

Investigating Factors Influencing Engineering and Computer Science Teachers' Professional Identity, Support Networks, Effectiveness, and Retention, 850K, 2022-2026 NSF Award Number #2243288

### **NSF DRK-12** (*Role: Principal Investigator*)

Measuring the Effectiveness of Middle School STEM-Innovation and Engineering Design Curricula , Awarded: 2.7M, 2021-2025, NSF Award # 2101441

### **NSF DRK-12** (*Role: Co-Principal Investigator*)

Students and Teachers Learning from Nature: Studying Biologically-Inspired Design in High School Engineering Education, 2.9M, 2019-2023, NSF Award # 1907906

### **NSF RETTL** (*Role: Co-Principal Investigator*)

Exploring Artificial Intelligence-enhanced Electronic Design Process Logs (AI-EDPL), 1M, 2021-2024, NSF Award # 2119135

### **US Dept of Education** (*Role: Principal Investigator*)

Evaluation of GA's Statewide Initiative, 800K, 2017-2025

### **NSF Noyce** (*Role: Principal Investigator*)

An Exploratory Study: The Role of Social Networks and Self-Efficacy in the Retention of Noyce Teachers, 489K, 2017-2021 NSF Award Number #1660597

### **NSF IGE** (*Role: Co-Principal Investigator*)

Integrating Team Science into the STEM Graduate Training Experience, 571K, 2017-2023, Award #1735017

### **NSF STEM+C** (*Role: Co-Principal Investigator*)

Culturally Authentic Practice to Advance Computational Thinking in Youth (CAPACiTY), 2.5M, 2016-2022, NSF Award #1639946

### **NSF Math & Science Partnership** (*Role: Co-Principal Investigator*)

NSF Math & Science Partnership: Advanced Manufacturing and Prototyping Integrated To Unlock Potential (AMP-IT-UP), 2012-2019, NSF Award #1238089

## BOOK CHAPTERS

**Alemdar, M.**, Gale, J., Cappelli, C., & Boice, K. (2022). An exploratory study: The role of social networks and self-efficacy in the retention of Noyce teachers. In L. Manier, T. York, & B. Calinger (Eds.), *Research in practice: Preparing and retaining K-12 STEM teachers in high-need school districts* (pp. 3-68). American Association for the Advancement of Science, [NSF Math & Science Partnership: Advanced Manufacturing and Prototyping Integrated To Unlock Potential \(AMP-IT-UP\), 2012-2019, NSF Award #1238089](#)

Pucha, R., Dosa, K., Newton, S., **Alemdar, M.**, Yow, R., and Hirsch, J. (2020). Integrating Sustainability into a Freshman Engineering Course Through an Institute-level Initiative. In *Integrating sustainable development into the curriculum: Innovations in Higher Education Teaching and Learning*. Patrick Blessinger (Ed). Publisher, Emerald Group Publishing, 2020.

Millman, R., **Alemdar, M.** and Harris, B., "A Meta-Analysis by Mathematics Teachers of the GIFT Program using Success Case methodology," in *Educational Interfaces between Mathematics and Industry*, pp. 421-426, (Damlamian, A, Ed.), New York: Springer (2013)

# SELECT PUBLICATIONS & REFEREED PAPERS

**Alemдар, M.**, Cappelli, C., Gale, J., & Boice, K.L. (2022). An Exploratory Study of STEM Teachers' Mentorship Networks. *International Journal of STEM Education*, 9, 64. <https://doi.org/10.1186/s40594-022-00383-7>

Gale, J., Koval, J., **Alemдар, M.**, Grossman, S., & Usselman, M. (2022). Sustaining shifts in science teaching through a research-practice partnership. *School Science and Mathematics*, 122(6), 298–310. <https://doi.org/10.1111/ssm.12545>

Gale J, **Alemдар M.**, Cappelli C and Morris D (2021). A Mixed Methods Study of Self-Efficacy, the Sources of Self-Efficacy, and Teaching Experience. *Front. Educ.* 6:750599. doi: 10.3389/educ.2021.750599

**Alemдар, M.**, & Ehsan, H., & Cappelli, C., & Kim, E., & Moore, R., & Helms, M., & Rosen, J. H., & Weissburg, M. (2021, July), Biologically Inspired Design For Engineering Education: Online Teacher *Professional Learning (Evaluation) Paper presented at 2021 ASEE Virtual Annual Conference Content Access*, Virtual Conference. 10.18260/1-2--36749

Newton, S., **Alemдар, M.**, Rutstein, D., Edwards, D., Helms, M., Hernandez, D., & Usselman, M. (2021). Utilizing evidence-centered design to develop assessments: A high school introductory computer science course. *Frontiers in Education: Measurement, Testing and Applied Measurement*. <https://doi.org/10.3389/educ.2021.695376>

Boice K. L., Jackson J. R., **Alemдар M.**, Rao A. E., Grossman S., Usselman M. (2021). Supporting teachers on their STEAM journey: A collaborative STEAM teacher training program, *Education Sciences*, 11(3):105.

**Alemдар, M.** & Cappeli, C.J. (2020, November 4). Program Evaluation Frameworks: Why do they matter? NSF Advancing Research & Innovation in the STEM Education of Preservice Teachers in High-Need School Districts (ARISE).

Gale, J. **Alemдар, M.**, Lingle, J.A., & Newton, S. (2020). Exploring Critical Components of an Integrated STEM Curriculum An Application of the Innovation Implementation Framework. *International Journal of STEM Education*.

Wind, S.A., **Alemдар, M.**, Lingle, J.A., Moore, R. & Asilalkan, A. (2019). "Exploring student understanding of the engineering design process using distractor analysis." *International Journal of STEM Education*, 6(4).

Moore, R.A., Newton, S., & **Alemдар, M.** (2019). K-12 InVenture Prize: Teacher reflections on educating K-12 inventors. *Technology and Innovation*, 20, 221 - 233. <http://dx.doi.org/10.21300/20.3.2019.221>

Cappelli, C., Boice, K., & **Alemдар, M.**, (2019) Evaluating University-Based Summer STEM Programs: Challenges, Successes, and Lessons Learned, *Journal of STEM Outreach*, Vol.2. DOI: <https://doi.org/10.15695/jstem/v2i1.13>.

**Alemдар, M.**, Moore, R., Lingle, J., Rosen, J, Gale, J., & Usselman, M. (2018). The Impact of a Middle School Engineering Course on Students' Academic Achievement and Non-Cognitive Skills. *International Journal of Education in Mathematics, Science and Technology*, 6(4), 363-380. DOI: 10.18404/ijemst.440339.

**Alemдар, M.**, Cappelli, C., Criswell, B., & Rushton, G. (2018). Evaluation of a Noyce Program: Development of Teacher Leaders in STEM Education. *Evaluation and Program Planning* (71), 1-11.

Criswell, B., Rushton, G., Nachtigall, D., Staggs, S., **Alemдар, M.** & Cappelli, C.J. (2018). Strengthening the vision: Examining the understanding of a framework for teacher leadership development by experienced science teachers. *Science Education*, 1-23.

Hernández, D., Usselman, M., Rana, S., **Alemдар, M.**, & Rao, A. (2018) Paving the road into college and STEM for Latino students. *Journal of STEM Outreach*, 1(2), 35-47. doi: 10.15695/jso.v1i2.4509.

Newton, S., **Alemдар, M.**, Hilton, E., Linsey, J., Fu, K. (2018). Incorporating industrial design pedagogy into a mechanical engineering graphics course: a discipline-based education research (DBER) approach. *International Journal of STEM Education* 5(29), 1-14.

Wind, S., **Alemдар, M.**, Lingle, J., Moore, R., & Gale, J. (2017). "Developing an Engineering Design Process Assessment using Mixed Methods: An Illustration with Rasch Measurement Theory and Cognitive Interviews." *Journal of Applied Measurement*.

**Alemдар, M.**, Lingle, J.A., Wind, S.A., & Moore, R.A. (2016). "Developing an Engineering Design Process Assessment Using Think Aloud Interviews." *International Journal of Engineering Education*, 32(6).

Hernández, D., Rana, S., **Alemдар, M.**, Rao, A., & Usselman, M. (2016). Latino parents' educational values and STEM beliefs. *Journal of Multicultural Education*, 10(3), 354-367. doi: 10.1108/JME-12-2015-0042

Swahn, M.H., **Alemдар, M.**, & Whitaker, D (2010). "Nonreciprocal and reciprocal dating violence and injury occurrence among urban youth". *Western Journal of Emergency Medicine*, vol. 11, no. 3, pp., 264-268.

Millman, R., **Alemдар, M.** and Harris, B., (2013) "A Meta-Analysis by Mathematics Teachers of the GIFT Program using Success Case methodology," in *Educational Interfaces between Mathematics and Industry*, pp. 421-426, (Damlamian, A, Ed.), New York: Springer.

Lingle, J. **Alemдар, M.** & Gale, J.. (2013). " The Impact of a Higher Education Summer Internship Program on K-12 Science Teachers. " *Proceedings of 2013 National Association for Research in Science Teaching*.

Hendricks, C., Ogletree, T., & **Alemдар, M.** (2012). The impact of participation in VEX Robotics Competition on middle and high school students' interest in pursuing STEM studies and STEM-related careers. *Proceedings of the 2012 American Society for Engineering Education Annual Conference*.

**Alemдар, M.**, Docal, T. (2011). Engaging K-12 Teachers in Technology Tools to Support Electronic and Mobile Learning Through an Online Professional Development Course, *Proceedings of American Society for Engineering Education (ASEE) Annual Conference*, June 2011.

**Alemдар, M.**, Rosen, J. (2011). Introducing K-12 Teachers to LEGO Mindstorm Robotics Through a Collaborative Online Professional Development Course, *Proceedings of American Society for Engineering Education (ASEE) Annual Conference*, June 2011.

Luken, B., Hotle, S., **Alemдар, M.**, A Case Study: Educating Transportation Engineers with Simulation Software, *Proceedings of American Society for Engineering Education (ASEE) Annual Conference*, June 2011.

Millman, R., **Alemдар, M.**, Harris, B., (2010). A Meta-analysis of Mathematics Teachers of the GIFT Program Using Success Case Methodology, *Proceedings of the ICMI-ICIAM Study Conference*, "Educational Interfaces between Mathematics and Industry", Editors: Araujo, Fernandes, Azevedo, Rodrigues, April, 2010, p.367-376.

**Alemдар, M.** (2010) Robert Noyce Scholarship Program, a partnership with Kennesaw State University, Evaluation Report, National Science Foundation, Atlanta, GA.

Swahn MH, **Alemдар M.**, Whitaker DJ (2010). Nonreciprocal and reciprocal dating violence and injury occurrence among urban youth. *Western Journal of Emergency Medicine*. 11:264-8.

# SELECT TECHNICAL REPORTS

**Alemdar, M.**, DeStefano, L., Cappelli, C. (2019-2021). *Social Network Analysis of L4GA*. Evaluation report prepared for the Georgia Department of Education.

Rana, S., Hernandez, D., **Alemdar, M.**, Usselman, M., & Beck, E. (2018, November). *GoSTEM 2017-2018 Annual Evaluation Report*. Presented to The Goizueta Foundation. Atlanta, GA: CEISMC.

**Alemdar, M.**, Cappelli, C. (2016). *Annual Evaluation Report of the Robert Noyce Teacher Scholarship Program: Pipeline to Teacher Preparation in Chemistry and Physics (CPU)*. Evaluation report prepared for the National Science Foundation.

**Alemdar, M.**, Cappelli, C., Rollins, L., Nehl, E. (2016). *Annual Evaluation Report of the Atlanta Clinical and Translational Science Institute (ACTSI)*. Evaluation report prepared for the National Institutes of Health.

**Alemdar, M.** & Cappelli, C. (2016). *Summative Evaluation Report of Noyce Initiative to Increase and Mentor Physics and Chemistry Teachers (I-IMPACT)*. Evaluation report prepared for the National Science Foundation.

**Alemdar, M.**, Cappelli, C., Andres, L. (2014). *Annual Evaluation Report of the Atlanta Clinical and Translational Science Institute (ACTSI)*. Evaluation report prepared for the National Institutes of Health.

**Alemdar, M.**, Lingle, J., Cappelli, C., Davis, T., Gale, J., Thompson, C. (2012). *An Evaluation Report of the Title IID Program "Engaging Advanced Placement Students Through Mobile Handheld Computing"*. Evaluation report prepared for the Georgia Department of Education.

Gowen, S., **Alemdar, M.** (2008). Evaluation of the Georgia Academic Learn & Serve Program, Year 2 Final Report (Second Term). Georgia Department of Education, Atlanta, GA.

Gowen, S., Furlow, C., **Alemdar, M.** (2007). Evaluation of the Georgia Academic Learn & Serve Program, Year 1 Final Report (Second Term). Georgia Department of Education, Atlanta, GA.



# SELECT RESEARCH & EVALUATION PRESENTATIONS AND TRAININGS

**Alemдар, M.**, Gale, J., Newton, S., Lingle, J. Rosen, J., Moore, J. "Science Integration in a Middle School Engineering Course". Annual International Conference of the National Association for Research in Science Teaching, Atlanta, GA, March 10-13, 2018.

**Alemдар, M.**, Cappelli, C., Gale, J., and Rana, S. (2018). *An Exploratory Study: The Role of Social Networks and Self-Efficacy in the Retention of Noyce Teachers*. Poster presented at the International Network for Social Network Analysis Conference, Utrecht, Netherlands.

**Alemдар, M.**, Cappelli, C., Gale, J., and Rana, S. (2018). *The Role of Social Networks and Self-Efficacy in the Retention of Noyce Teachers*. Poster presented at the 2018 Noyce Summit, Washington, D.C.

**Alemдар, M.**, Cappelli, C., Gale, J., Rana, S., Abdus-Salaam, R. (2018). *The Role of Social Networks and Self Efficacy in the Retention of Noyce Teachers*. Poster presented at the Southeast Regional Noyce Conference, Mobile, AL.

Gale, J., **Alemдар, M.**, Lingle, J., Newton, S., Moore, R., Rosen, J.(2018). Developing engineering proficiency and self-efficacy through a middle school engineering course. Proceedings of the American Society for Engineering Education.

**Alemдар, M.**, Cappelli, C. (2016). Evaluation of a Noyce Program: Development of Teacher Leaders in STEM Education. Paper presented at the National Association of Research in Science Teaching (NARST) Annual Conference, Baltimore, MD.

Cappelli, C., **Alemдар, M.**, Greenwood, A., De Veaux, C., Tierney, R. (2016). *A Summer Program: Engaging Middle School Students in Transportation Engineering*. Poster presented at the Georgia Tech STEM Education Research Expo, Atlanta, GA.

Lingle, J., **Alemдар, M.**, Wind, S., Moore, R., & Usselman, M. (2016). "The Development and Validation of an Engineering Assessment." Proceedings of the 2016 Annual Conference of the National Association for Research in Science Teaching. Baltimore, MD.

Lingle, J., **Alemдар, M.**, & Rana, S. (2016). "Exploring 21<sup>st</sup> Century Skills in Formal and Informal Educational Settings." Presented at the 2016 American Evaluation Association (AEA) National Conference.

**Alemдар, M.**, Lingle, J., Moore, R., Newton, S., Usselman, M., & Wind, S. (2016). "The impact of STEM Innovation and Design Courses on Secondary Students' Achievement and Non-Cognitive Skills Related to Engineering Design." Poster presented at the 2016 GT-ASEE STEM Education Research Expo. Atlanta, GA.

Hilton, E., Li, W., Newton, S.H., **Alemдар, M.**, Pucha, R., & Linsey, J. (August, 2016). *The development and effects of teaching perspective free-hand sketching in engineering design*. Presented at the ASME 2016 International Design Engineering Technical Conference and Computers and Information in Engineering Conference: Charlotte, NC.

**Alemдар, M.**, Rosen, J., Moore, R., Lingle, J., Newton, S., & Wind, S. (August, 2016). *The development of STEM innovation and engineering design courses, and its impact on middle school students' achievement and non-cognitive skills related*. Presented at the 3<sup>rd</sup> Annual P-12 Engineering and Design Research Summit, Chicago, IL.

Pucha, R.V., Newton, S.H., **Alemдар, M.**, & Utschig, T.T. (November, 2016). *Process-oriented intervention and reflection strategies for creativity in student design projects*. Presented at the Fourth International Conference on Design Creativity (4<sup>th</sup> ICDC), Atlanta: GA.

Moore, R.A., **Alemдар, M.**, Newton, S., Lingle, J., Rosen, J., Usselman, M., Wind, S.A. (2015). High School Engineering Class: From Wood Shop to Advanced Manufacturing. Conference Proceedings of American Society of Engineering Education, June 2015, Seattle, WA.

**Alemдар, M.**, Lingle, J., Moore, R. & Wind, S. (2015). Developing an Engineering Design Assessment Using Think-Aloud Interviews. Paper presented at the Annual Conference of the National Association for Research in Science Teaching. Chicago, IL.

Wind, S., **Alemдар, M.**, Gale, J., & Lingle, J. (2015). Developing an Engineering Design Process Assessment Using Mixed Methods: An Illustration with Rasch Measurement Theory and Cognitive Interviews. Paper presented at the Annual Conference of the American Evaluation Association. Chicago, IL.

**Alemдар, M.**, Wind, S., Lingle, J., Moore, R., & Usselman, M (2015). Developing an Engineering Design Assessment Using Mixed-Methods Design. Poster presented at the GT-ASEE STEM Education Research Expo. Atlanta, GA.

**Alemдар, M.**, Cappelli, C. (2015). An Assessment of the Collaborations for Inter-Institutional Translational Research using Social Network Analysis. Poster presented at the annual XXXIV Sunbelt Conference of the International Network for Social Network Analysis (INSNA), Brighton, UK.

**Alemдар, M.**, & Lingle, J. & Nguyen, M. (2014). "Evaluating 21<sup>st</sup> Century Skills: A case Study of one K-12 Private School". Presented at the 2014 American Evaluation Association (AEA) National Conference.

**Alemдар, M.**, Cappelli, C., Andres, L., Akintobi, T., Dodds, A. (2014). Use of Social Network Analysis Tools to Document Collaboration for Inter-Institutional Translational Research. Presented at the annual 2014 INSNA Sunbelt XXXIV International Social Network Analysis Conference.

**Alemдар, M.**, Davis, T. (2013). "Challenges of a Multi-Site Evaluation of a Science, Technology, Engineering, and Mathematics (STEM) Research Program for Teachers." Presented at the 2013 American Evaluation Association (AEA) National Conference.

**Alemдар, M.**, Davis, T. (2013). "Professional Learning Communities and the Promotion of Cross-School Collaboration." Presented at Annual 2013 Math and Science Partnerships Conference.

**Alemдар, M.** & Cappelli C. (October, 2013). "Utilization of Web-based Collaboration Site as a Program Evaluation Tool". Presented at the 2013 American Evaluation Association (AEA) National Conference.

Hendricks, C., **Alemдар, M.**, & Ogletree, T. (2012). "The impact of the VEX Robotics Competition on problem-solving, collaboration, and communication." Presented at the 2012 Annual conference of the International Society for Technology in Education.

Gale, J., Lingle, J., & **Alemдар, M.** (2012). "An Evaluation of Self-Paced STEM Online Professional Learning Courses." Presented at the 2012 Annual Conference of the American Evaluation Association.

**Alemдар, M.**, Cappelli, C. Lingle, J., Gale, J., Davis, T., & Thompson, C. (2012). "Technology Implementation in AP Courses: Evaluating a State Funded Title IID Program." Presented at the 2012 Annual Conference of the American Evaluation Association.

**Alemдар, M.**, & Davis, T. (2012). "The Impact of a Math and Science Partnership (MSP) Program on Teacher Self-Efficacy." Presented at the 2012 Annual Conference of the American Evaluation Association.

**Alemдар, M.** (2011) Evaluation of Robert Noyce Scholarship Program. American Evaluation Association (AEA), Anaheim, California, November 1-6, 2011.

Millman, R., **Alemдар, M.**, Harris, B., (2011). *A Meta-analysis of Mathematics Teachers in the industrial Internship GIFT Program*, Conference of the international Group for Psychology of Mathematics Education (PME), Ankara, Turkey. July 10-15, 2011.

**Alemдар, M.**, Ryan M., Rosen, J., Docal, T. *The NASA Electronic Professional Development Network (ePDN): Online Professional Development Courses for Teachers*, (2011) National Science Teacher Association (NSTA) Conference San Francisco, California, USA . March 10-13, 2011

Swahn, M.H. , **Alemдар, M.**, & Hamburger, M. (November 2009). Nonreciprocal and Reciprocal Dating Violence and Abuse among Urban Youth. Paper is accepted for presentation at the American Society of Criminology.

Swahn, M.H. , **Alemдар, M.**, & Whitaker, D. . (November 2009). Alcohol and Violence among Urban Youth: Comparing Correlates of Alcohol-Related Physical Fighting versus Other Physical Fighting. Paper is accepted for presentation at the American Society of Criminology.

**Alemдар, M.** (April 2009). A Monte Carlo Study: The impact of missing data in cross-classified random effect models. Poster presented at the Annual Conference for the American Educational Research Association, San Diego, CA.

Lingle, J., **Alemдар, M.**, & Gowen, S. ( April 2009). Comparing Methods of Propensity Score Estimation with Partially missing Data. Paper presented at the Annual Conference for the American Educational Research Association, San Diego, CA.

Lingle, J., **Alemдар, M.**, Gowen, S., & Skelton, S. (March 2008). School Engagement, After School Activities, and Health-Risk Behaviors: Results from an Evaluation of Community-Based After School Programs. Paper presented at the Annual Conference for the American Educational Research Association, New York, NY.

Gowen, S., **Alemдар, M.** (June, 2008). Evaluation of Academic Service Learning Program (Year 3). Evaluation training conducted at the State Kickoff Conference: GA Academic Service Learning. St. Simons, GA

**Alemдар, M.** Gowen, S. (September, 2007). Evaluation GA Academic Service Learning Findings (Year 2). Paper presented at Service Learning Conference, Atlanta, GA.

**Alemдар, M.** Gowen, S. (June, 2007). Evaluation of Academic Service Learning Program. Evaluation training conducted at the State Kickoff Conference: GA Academic Service Learning. St. Simons, GA

**Alemдар, M.**, Furlow, C. (April 2007). The impact of Missing Data in cross-classified models. Paper presented at Sixth International Amsterdam Conference on Multilevel Analysis, Amsterdam, Netherlands.

**Alemдар, M.** (October, 2006). The Value of Evaluation: Teacher Training Programs in Turkey. Poster presented at American Evaluation Association Conference, Portland, Oregon.

**Alemдар, M.**, Gowen, S. (June, 2006). Evaluation of Academic Service Learning Program. Evaluation training (Year 3) conducted at the State Kickoff Conference: GA Academic Service Learning. St. Simons, GA

**Alemдар, M.**, Gowen, S., Furlow, C. (April, 2006). An Evaluation GA Academic Service Learning. Paper presented at the Annual Conference for the American Educational Research Association, San Francisco, CA.

**Alemdar, M.,** Furlow, C. (November, 2005). *Investigation of Missing Data Patterns in Georgia Academic Learn & Serve Program*, Paper presented at the 5<sup>th</sup> Annual International Learn & Serve Conference, East Lansing, MI.

**Alemdar, M.,** Furlow, C. (August, 2005). *Evaluation of the Academic Learn and Serve Program Using HLM*. Poster presented at the American Psychology Association Annual Convention, Washington DC.

**Alemdar, M.,** Livingston, S. (June, 2005). Evaluation of Academic Service Learning Program. Evaluation training (Year 3) conducted at the State Kickoff Conference: GA Academic Service Learning. St. Simons, GA.

**Alemdar, M.** (February, 2005). *John Dewey's Impact on Today's Turkish Education System*. Paper presented The Southeast Philosophy of Education Society Conference, Orlando, FL.

**Alemdar, M.,** Livingston, S. (June, 2004). Evaluation of Academic Service Learning Program. Evaluation training (Year 2) conducted at the State Kickoff Conference: GA Academic Service Learning. Athens, GA

**Alemdar, M.,** Livingston, S., Gowen, S. *Evaluation challenges faced when assessing a service-learning program*. Poster presented at the 2004 International Service-Learning Research Conference, Greenville, SC.

# SELECT EXTERNAL FUNDING (SERVED AS EXTERNAL EVALUATOR)

## **NSF IUSE (Undergraduate Research) *(Role: External Evaluator)***

Program to integrate mobile, hands-on experiments into the ME, AE, and ECE curricula. Amount: \$599,947

## **NSF Noyce Scholarship *(Role: External Evaluator)***

Robert Noyce Teacher Scholarship Program: Pipeline to Teacher Preparation in Chemistry and Physics (CPU).

## **NSF Noyce Scholarship *(Role: Evaluator)***

Noyce Initiative to Increase and Mentor Physics and Chemistry Teachers (I-IMPACT). Amount: \$5M

## **Goizueta Foundation STEM Initiative *(Role: External Evaluator)***

CoSTEM

## **Atlanta Science Festival *(Role: External Evaluator)***

## **NIH *(Role: Director of Evaluation & Tracking)***

The Atlanta Clinical and Translational Science Institute (ACTSI), Overall Amount: \$35M

## **NSF RDE Project *(Role: Evaluator)***

Collaborative Research: Georgia STEM Accessibility Alliance (GSAA)

## **Georgia Dept of Education *(Role: Principal Investigator)***

Engaging AP students through Mobile Handheld Computing, Amount: \$220K, Project Period: 01/13/2011-02/12/2012

## **Georgia Dept of Education *(Role: Principal Investigator)***

Increasing Student Achievement with Digital Resources, Amount: \$100K, Project Period: 03/30/2010-11/30/2011

## **NASA *(Role: External Evaluator)***

ePDN Project, Project Period: 3/1/09—9/30/12

## **Georgia Dept of Education *(Role: External Evaluator)***

The Museum School Race to the Top Innovation Fund "Museum in a Box", Project Period: 2012-2016

## **Georgia Dept of Education MSP Projects *(Role: Evaluator)***

Macon County Math & Science project, Floyd County Math & Science Project

## **Evaluation of Westminster School Initiative *(Role: Principal Investigator)***

Amount: \$300K, Time Period: 06/01/2012-09/30/2015

## SELECT SERVICE ACTIVITIES

### Georgia Institute of Technology

#### **Faculty Senate, Research Faculty Representative**

2020-2023

*Elected position, ex-officio*

#### **Faculty Governance, Research Faculty Representative**

2018-2020

*Elected position, ex-officio*

#### **Climate Survey Taskforce**

#### **Institutional Assessment Committees**

#### **Master Level STEM Policy Class & Research Methods, Instructor**

#### **Faculty & Graduate Student Education Research Methods Course, Instructor**

### Georgia State University

#### **Research Methods & Statistics, Instructor**

2020-2023

*Elected position, ex-officio*

#### **Education Policy Department Taskforce for development of Program Evaluation certification program**

## AWARDS & HONORS

### **CEISMC Leadership Award**

Georgia Institute of Technology

2017 & 2022

### **Institutional Diversity Leadership Award**

Georgia Institute of Technology

2016

### **Who's Who Among Graduate Schools Honor**

Georgia State University

2006

### **Outstanding Leadership Award**

Georgia State University,  
Awarded by International Student Association Council

2003

## REFERENCES

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