

CONSTANCE P. HARGRAVE

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EDUCATION

Doctor of Philosophy - Curriculum & Instructional Technology; Iowa State University, 1993

Master of Arts - Communications and Training Technology; University of Northern Iowa, 1989

Bachelor of Science - Communications; Evangel College, 1987 (Cum Laude)

EMPLOYMENT

Associate Professor, School of Education, Center for Technology in Learning & Teaching, Iowa State University; July, 2001 - present.

Teach undergraduate and graduate courses in Instructional Technology & direct master's and doctoral students' research.

Faculty appointment, Department of Human Computer Interactions, Iowa State University, 2002- present

Director, Science Bound, Iowa State University; May 2006 – present.

Provide vision and leadership for a pre-college STEM education development program serving 350+ underrepresented students of color in 19 schools across three school districts.

- Articulate vision for STEM achievement and access for underrepresented students of color to all constituents (e.g. parents, families, students, teachers)
- Hire and supervise ISU staff and 40+ teachers across three districts to carry out programming.
- Provide programmatic framework for regular operations to ensure quality and consistency across schools and districts.

Director of Graduate Education, Department of Curriculum & Instruction, Iowa State University, 2003-2006.

Assistant Professor, Department of Curriculum and Instruction, Iowa State University; August, 1993-2001.

Senior Associate for Educational Technology & Science Education, U.S. Department of Energy Office of University & Science Education, Washington, D.C. (1 year appointment) November, 1993-November, 1994.

Responsible for the development and initial implementation of Department of Energy initiatives for educational technology in K-16 science education programs. Inter-agency collaboration for technology integration with U.S. Departments of Education and Commerce.

Manager, Education Programs, Ames Laboratory of the U.S. Department of Energy; Iowa State University September, 1991-May, 1995.

Developed and administered science, math, and technology education outreach programs that made scientific expertise of a national science research laboratory available to K-16 educational environments. Coordinated recruitment of minority and female graduate students for degrees in physical sciences. Served as liaison between Iowa State University College of Education & Laboratory Education Programs. Administrative tasks included budgeting, personnel supervision, grant writing, and communication with U.S. Department of Energy federal offices.

TEACHING EXPERIENCE

Assistant/ Associate Professor, Iowa State University; Fall, 1993-Present.

courses: Foundations of Instructional Technology; Principles of Flexible & Distance Learning; Digital Learning in K16 Environments; Mathematics and Science of Softball (honors seminar); Learning Science; Technology in Teaching & Learning; Video Remixing & New Media Literacies; Designing Effective Learning Environments.

Instructor, Monterey Institute of Technology; Monterey, Mexico; Summer, 1991.

course: Technology in Education. Taught graduate level technology integration course. Emphasis on potential uses & philosophies supporting technology in education. Content included digital learning applications, media-based instruction, & instructional development.

EXTERNALLY FUNDED PROJECTS (STEM Outreach n = 35 \$3,500,975)

Hargrave, C.P., STEM Education Preparation Program for Rural Latino Students in Iowa: Denison Science Bound; August, 2017 – May, 2022. Funded by Smithfield Foods, Inc. \$375,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2015 – September, 2016. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2015 – September, 2016. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2014 – September, 2015. Funded by Anderson Corporation Foundation, \$10,000.

Rollins, A. D. & **Hargrave, C. P.** Post-Graduate Pipeline (P²) Upperclassman Seminar. October 2013- May, 2015. Funded by Proctor & Gamble, \$10,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2013 – September, 2014. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2012 – September, 2013. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C. P. & Colletti, J., Preparing Iowa Ethnic Minority Students for Agricultural Sciences: Science Bound/ College of Agriculture and Life Sciences Leadership Program; January 2013 – December, 2018. Funded by DuPont Pioneer, \$400,000.

Hargrave, C.P., Des Moines Science Bound Learn & Earn; December, 2012 – August, 2013. (Support operation of mathematics boot camp for high school students.) Funded by private donor, \$25,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2012 – September, 2013. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Development and Institutionalization of a STEM Education Preparation Program for Rural Latino Students in Iowa: Denison Science Bound; August, 2012 – May, 2017. Funded by Smithfield Foods, Inc. Learners to Leaders, \$310,000.

Hargrave, C. P., Preparing Iowa Ethnic Minority Students for Advanced Mathematics & Basics of Agricultural Sciences; May – December, 2012. Funded by DuPont Pioneer, \$30,000.

Hargrave, C. P., Intendalo- Just Try It: Empowering Ethnic Minority Students to Participate in First Tech Challenge Robotics; December, 2011 – March 2012. Funded by DuPont Pioneer, \$25,000.

Hargrave, C. P., Encouraging Academic Excellence in STEM among High School Students; September, 2011- June, 2012. Funded by CenturyLink, \$25,000.

Hargrave, C. P., Des Moines Science Bound; February – September, 2011. Funded by Pioneer Hi-Bred, \$10,000.

Hargrave, C.P., Preparing Rural Latino Students for College: Marshalltown Science Bound; December, 2011 - December, 2014. Funded by Martha Ellen Tye Foundation, \$30,000.

Hargrave, C.P., Des Moines Science Bound Learn & Earn; December, 2011 – August, 2012. (Support operation of mathematics boot camp for high school students.) Funded by private donor, \$25,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2011 – September, 2012. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Partnering to Prepare Rural Latino Students for STEM Careers: Marshalltown Science Bound; September, 2011-May 2016. Funded by Emerson/Fisher Controls, \$175,000.

Hargrave, C.P., Des Moines Science Bound Learn & Earn; December, 2010 – August, 2011. (Support operation of mathematics boot camp for high school students.) Funded by private donor, \$28,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; October, 2010 – September, 2011. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Preparing Students of Color for STEM Careers; September, 2010 – September, 2011. Funded by Halliburton Foundation, \$10,000.

Hargrave, C.P., Des Moines Science Bound Learn & Earn; December, 2009 – August, 2010. (Support operation of mathematics boot camp for high school students.) Funded by private donor, \$25,000.

Hargrave, C.P. and Jefferies-El, M., Fostering Interest in the Chemical Sciences via Peer-Led Outreach; May, 2009 – May, 2011. Funded by The Camille & Henry Dreyfus Foundation, \$25,000.

Hargrave, C.P., Preparing Minority Students for Engineering Careers: Des Moines Science Bound; May, 2009 – May, 2010. Funded by Anderson Corporation Foundation, \$10,000.

Hargrave, C.P., Empowering Ethnic Minority Youth for STEM careers: Implementation and Growth of Marshalltown Science Bound; September, 2007-May 2011. Funded by Martha Ellen Tye Foundation, \$80,000.

Hargrave, C.P., Preparing Students for STEM Careers: Marshalltown Science Bound; September, 2007-May 2011. Funded by Emerson/Fisher Controls, \$100,000.

Hargrave, C.P., Design & Development of a STEM Education Preparation Program for Rural Latino Students in Iowa: Denison Science Bound; May, 2007 – May, 2012. Funded by Smithfield Foods, Inc. Learners to Leaders, \$301,350.

Hargrave, C.P., Accessing Leaders Capable Of Achievement; February, 2007 – May, 2010. Funded by Alcoa, \$11,540.

Hargrave, C.P., PIPELINES: Program to Increase the Pursuit of Education and Learning in Engineering; May, 2006 – April, 2009. Funded by National Aeronautics and Space Administration, \$1,200,000.

Hargrave, C.P., Ames Summer Student Trainees; October 1996 - September 1997. (Project to implement research internships for undergraduate science majors.) Funded by U.S. Department of Energy, \$50,000.

Hargrave, C.P. and Ohana, C.P., Iowa Junior Solar Sprint; November 1994 – June 1995. (Solar car design competition for middle school students.) Funded by Iowa Department of Natural Resources, \$5,000.

Hargrave, C.P., National Geographic Kids Network Teacher Institute; October 1993-September 1994. Funded by National Geographic Society & U.S. Department of Energy, \$30,000.

Hargrave, C.P., Science Carnival for Elementary Schools; October 1993-September 1994. Funded by U.S. Department of Energy, \$10,000.

Downs, G., Rudolph, W., & **Hargrave, C.P.**, Middle School Math & Science; May 1992-May 1994. (Summer day camp for minority students.) Funded by U.S. Department of Energy & Iowa Space Grant Consortium, \$185,000.

Hargrave, C.P. Ames Laboratory Science Bowl; December 1991- September 1992. Funded by U.S. Department of Energy, \$5,000.

EXTERNALLY FUNDED PROJECTS (Instructional Technology/Design n = 22 \$3,347,003)

Schmidt, D.A., **Hargrave, C.P.**, and Niederhauser, D.S., Turkish Student Teacher Internship Program; August, 2009 – December, 2010. Funded by U.S. State Department, \$399,982.

Schmidt, D.A., **Hargrave, C.P.**, and Niederhauser, D.S., Turkish Student Teacher Internship Program; August, 2008 – December, 2009. Funded by U.S. State Department, \$374,998.

Schmidt, D.A., **Hargrave, C.P.**, and Niederhauser, D.S., Turkish Student Teacher Internship Program; July, 2007 – December, 2008. Funded by U.S. State Department, \$348,779.

Niederhauser, D.S., **Hargrave, C.P.**, and McShay, J., Turkish Student Teacher Internship Program; August, 2006 – August, 2007. Funded by U.S. State Department, \$299,974.

Niederhauser, D.S., **Hargrave, C.P.**, and McShay, J., Turkish Student Teacher Internship Project and International Conference; October, 2005 – September, 2006. \$299,861.

Niederhauser, D.S., **Hargrave, C.P.**, & McShay, J., Turkish Student Teacher Internship Program; October, 2004 – September, 2005. Funded by U.S. Department of State, \$199,751.

Hargrave, C.P., Bilkent/ISU International Teacher Internship Program; July, 2003 – June, 2004. Funded by U.S. Department of State, \$176,000.

Andre, T., **Hargrave, C.P.**, Chumbley, S., & Constant, K., Preparing Inservice and Preservice Teachers to Integrate WebSEM into K-12 Science Instruction; April, 2001 – March, 2002. Funded by Qwest, \$24,500.

Constant, K., Andre, T., Chumbley, S., Hand, B., **Hargrave, C. P.**, Thompson, A., Incorporating Inquiry-based Science Modules Involving an Environmental Scanning Electron Microscope into Preservice Teacher Education Classes; October 1999- September 2001. Funded by National Science Foundation Directorate for Education and Human Resources, \$74,877.

Yarger, D., Boysen, J.P., **Hargrave, C.P.**, & Thomas, R., Learning to Teach while Learning to Learn; October 1998 – December 1999. (Curriculum development project to develop internet-based simulations for undergraduate science education.) Funded by National Science Foundation Department of Undergraduate Education, \$232,500.

Chumbley, S. Constant, K., **Hargrave, C.P.**, & Thompson, A., The Extended Classroom for Enhanced Learning (equipment grant); July 1998- June 2000. Funded by National Science Foundation Instrumentation and Laboratory Improvement, \$120,000.

Yarger, D., **Hargrave, C.P.**, Boysen, J.P., & Thomas, R., A Model for Learning and Teaching Science for Preservice Teachers; September 1997- September 1999. (Project to implement simulation-based science instruction in teacher education.) Funded by National Science Foundation Department of Undergraduate Education, \$43,281.

Hargrave, C.P., Center for Collaborative Educational Technology Initiatives; October 1995-November 1996. (Project to coordinate Department of Energy's national science education projects involving the use of educational technology.) Funded by U.S. Department of Energy, \$150,000.

Hargrave, C.P., & Ohana, C.P. Teacher Education and Achievement in Math and Science; October 1995-September 1996. (Project to recruit high ability math and science students for elementary education.) Funded by U.S. Department of Energy, \$75,000.

Hargrave, C.P., & Ohana, C.P. Teacher Education and Achievement in Math and Science; October 1994-September 1995. (Project to recruit high ability math and science students for elementary education.) Funded by U.S. Department of Energy, \$128,000.

Hargrave, C.P., Citizens for Environmental Justice: Savannah Initiative; March 1994 - October 1994. (Curriculum development project to enhance citizen participation in environmental issues.) Funded by Savannah State College, \$25,000.

Hargrave, C.P., Appointment to U.S. Department of Energy; October 1993-October 1994. (One-year assignment to DOE Headquarters to develop educational technology outreach initiatives.) Funded by U.S. Department of Energy, \$185,000.

Hargrave, C.P. & Thompson, A. Teacher Education and Achievement in Math and Science; October 1993-September 1994. (Project to recruit high ability math and science students for elementary education.) Funded by U.S. Department of Energy, \$60,000.

Hargrave, C.P., Kids Network Electronic Bulletin Board for Teachers; February 1992- September 1993. Funded by U.S. Department of Energy, \$12,000.

Hargrave, C.P. & Thompson, A. Recruiting High Ability Math and Science Students for Education; June 1992- September 1993. Funded by U.S. Department of Energy, \$40,000.

Hargrave, C.P., National Geographic Kids Network Teacher Institute; January-September 1992. Funded by National Geographic Society & U.S. Department of Energy, \$7,500.

Hargrave, C.P., Mathews, J., & Rudolph, W. Improving Success In Calculus; October 1991 - December 1992. (High School Pre-calculus Curriculum Development Project.) Funded by U.S. Department of Energy, \$70,000.

INTERNALLY FUNDED PROJECTS (n = 11 \$909,782)

Hargrave, C.P., SCIENCE BOUND; July, 2014- June, 2015. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$115,000.

Hargrave, C.P., SCIENCE BOUND; July, 2013- June, 2014. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$115,000.

Hargrave, C.P., SCIENCE BOUND; July, 2012- June, 2013. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$115,000.

Gansemer-Topf, A. M. and **Hargrave, C.P.**, Examining Pre-Collegiate Factors that Influence College Matriculation and Enrollment in STEM Fields for Underrepresented Ethnic Minority Students; July, 2012- June, 2013. Funded by Iowa State University College of Human Sciences, \$9,632.

Hargrave, C.P., SCIENCE BOUND; July, 2011- June, 2012. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$92,000.

Hargrave, C.P., SCIENCE BOUND; July, 2010- June, 2011. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$90,000.

Hargrave, C.P., SCIENCE BOUND; July, 2009- June, 2010. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$88,250.

Hargrave, C.P., SCIENCE BOUND; July, 2008- June, 2009. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$92,000.

Hargrave, C.P., SCIENCE BOUND; July, 2007- June, 2008. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$92,000.

Hargrave, C.P., SCIENCE BOUND; July, 2006- June, 2007. (Core operation of Des Moines Science Bound program) Funded by Iowa State University General University Fund for Excellence, \$62,000.

Foegen, A., Schmidt, D., & **Hargrave C.P.**, Learning and Teaching with Group Response Technology; July 1998 - June 1999. (Project to study the use of group response technology in undergraduate education courses.) Funded by Miller Faculty Fellowship, Iowa State University, \$38,900.

PUBLICATIONS

Refereed Journal Articles

Hargrave, C. P. (2015). Counter space: Analysis of educational structures of an after-school program that fosters Black academic success narratives. Journal of Negro Education, 84(3) p. 348-361.

Dade, K. Tartakov, C., **Hargrave, C.P.**, & Leigh, P. R., (2015). Assessing the Impact of Racism on Black Faculty in White Academe: A Collective Case Study of African American Female Faculty. Western Journal of Black Studies, 39(2) p.134-146.

Chumbley, S., **Hargrave, C.P.**, Constant, K., Andre, T., & Hand, B. (2002) Project ExCEL- Web based SEM for K-12 Education. Journal of Engineering Education, 10(1) p. 203-210.

Hargrave, C.P. & Hsu, Y.S. (2000). Survey of Instructional Technology Courses for Preservice Teachers. Journal of Technology and Teacher Education, 8(4) p. 303-314.

Hargrave, C.P. & Kenton, J.M. (2000). Preinstructional Simulations: Implications for Science Classroom Teaching. Journal of Computers in Mathematics and Science Teaching, 19(1) p. 47-58.

Foegen, A. & **Hargrave, C.P.** (1999). Group Response Technology in Lecture-based Instruction: Exploring Student Engagement and Instructor Perceptions. Journal of Special Education Technology, 14(1) p. 17-29.

Sadera, W. A. & **Hargrave, C.P.** (1999). Identification of Preservice Teachers' Preconceptions about the Role of the Computer in Learning and Teaching. Journal of Computing in Teacher Education, 15(4) p. 19-23.

Books and Book Chapters

Hargrave, C.P., Rollins, A.D., & Romero, D.E. (2017) Flying Below The Radar: Tapping into Cultural Assets of High School Parents of Color. In A. Esmail (Ed.) Diversity, Equity, and Social Justice Handbook for Practicing Educators: Leadership. Roman & Littlefield Education. (in press).

Correia, A.P., **Hargrave, C.P.**, Leigh, P., Michelini, C., Schmidt, D., & Thompson, A. (2009, July). The Making of an Online Masters Program in the North American Context. In A. Tatnall, & A. Jones (Eds.), Education and Technology for a Better World, Proceedings of the 9th IFIP TC3 World Conference in Education (pp. 148-156). New York: Springer.

Sadera, W. A. & **Hargrave, C.P.** (2005). Conceptual Change in Teacher Technology Preparation. In C. Vrasidas & G.V. Glass (Eds.), Current Perspectives on Applied Information Technologies: Preparing teachers to teach with technology. Information Age Publishing.

Hargrave, C. P. & Thompson A. D. (2001). TEAMS: A Science Learning and Teaching Apprenticeship Model. In D. Lavoie & W.M. Roth(Eds.), Models for Science Teacher Preparation: Bridging the Gap between Research and Practice. Kluwer Academic Publishers.

Thompson, A. D., Simonson, M. R., & **Hargrave, C. P.** (1992 & 1996). Educational Technology: A Review of the Research. Washington DC: Association for Educational Communications & Technology.

Hargrave, C.P. (1996). Educational Technology Research. In A.D. Thompson, M. Simonson, & C.P. Hargrave (authors), Educational Technology: A Review of the Research. Washington DC: Association for Educational Communications & Technology.

Hargrave, C.P. (1996). Research Reviews. In A.D. Thompson, M. Simonson, & C.P. Hargrave (authors), Educational Technology: A Review of the Research. Washington DC: Association for Educational Communications & Technology.

Hargrave, C.P. (1993). Hypermedia in the Classroom. In A. D. Thompson & D.A. Schmidt (authors), Educational Applications of Microcomputers. p. 59-71. Dubuque, IA: Merrill.

Conference Proceedings

Correia, A.P., Ali, S. N., Iino, H. & Hargrave, C.P. (2010) Evaluation of an Online Master Program: From the Distance Learning Users' Perspective. In M. Simonson (Ed.), 33rd Annual Proceedings of the Association for Educational Communications and Technology Convention. (pp. 452-460). Anaheim, CA.

Hargrave, C., Chace, C. & Jung, A. (2010). Using an experiential learning approach to prepare pre-service teachers to teach online. In C. Crawford et al. (Eds.), Proceedings of Society for Information Technology & Teacher Education International Conference 2010 (pp. 3244-3248). Chesapeake, VA: AACE.

Heer, R. & **Hargrave, C.P.** (2007) My Space in College: Students use of Virtual Communities to Define their Fit in Higher Education Technology and Teacher Education Annual. (pp. 289 -293). San Antonio, TX.

Sadera, W.A. & **Hargrave, C.P.**, (2004) Conceptual Change in Preservice Teacher Technology Preparation. Technology and Teacher Education Annual. (pp. 334 -338). Atlanta, GA.

McGregor, L. & **Hargrave, C.P.**, (2003) Real-time Science Tools for K-12 Tele-Experimentation. Technology and Teacher Education Annual. (pp. 412-419). Albuquerque, NM.

Hargrave, C.P., Foegen, A., & Schmidt, D.A. (2000). Teacher Educators' Reflections on Using Group Response Technology. Technology and Teacher Education Annual. (pp. 502-508). San Diego, CA.

Flickinger, K. I. & **Hargrave, C.P.** (2000). College Science Instruction via Internet: How effective is it? Proceedings of the International Conference on Mathematics/Science Education and Technology. (pp. 151-156). San Diego, CA.

Flickinger, K. I. & **Hargrave, C.P.** (2000). Case Study of Students' Learning Experiences in an Internet-based College Science Course. (abstract). Proceedings of the International Conference on Mathematics/Science Education and Technology, (p. 36). San Diego, CA.

Hargrave, C. P. & Sadera, W.A. (2000). Preservice Teachers' Beliefs about Effective Uses of Computers in the Classroom: A Content Analysis of Narratives. Technology and Teacher Education Annual. (pp. 1355-1361). San Diego, CA.

Wang, H.S., **Hargrave, C.P.** & Hsu, Y.S. (1999). Examining the Use of Different Teaching and Learning Strategies in Computer Courses for Inservice Education. Technology and Teacher Education Annual. (pp. 746-749). San Antonio, TX.

Non-Refereed Publications and Monographs

Foegen, A. & **Hargrave, C. P.** (1998). Discourse: Groupware for interactive classroom communication [software review]. Journal of Computers in Teacher Education, 13(2) p. 30-32.

Gottesman, I., **Hargrave, C.P.**, & Wade, A. (2016). History of Iowa State University Science Bound.

EDITORIAL POSITIONS

Associate Editor, (1996 - 1998). Journal of Computers in Teacher Education.

Co-Editor, (1990 & 1991). National Convention Proceedings of the Association of Educational Communications and Technology.

TECHNICAL REPORTS

Hargrave, C. P. and Rollins, A. D., (2016, September). Science Bound Annual Report FY2016.

Hargrave, C. P. and Rollins, A. D., (2015, September). Science Bound Annual Report FY2015.

Hargrave, C.P. (2014, December) Educational Philosophy of Science Bound. Iowa State University Science Bound.

Hargrave, C.P., and Rollins, A.D., (2014, December). Denison Science Bound Project 2013-14. Report to the Smithfield-Luter Foundation.

Hargrave, C.P., and Rollins, A., (2014, December). Marshalltown Science Bound Project 2013-14. Report to Corporate Sponsors.

Hargrave, C. P. and Rollins, A.D., (2014, July). Science Bound Annual Report FY14. Project Report to the Iowa State University Provost Office.

Hargrave, C.P., and Rollins, A., (2013, September). Marshalltown Science Bound Project 2012-13. Report to Corporate Sponsors.

Hargrave, C.P., and Rollins, A.D., (2013, August). Denison Science Bound Project 2012-13. Report to the Smithfield-Luter Foundation.

Hargrave, C. P. and Rollins, A.D., (2013, July). Science Bound Annual Report FY13. Project Report to the Iowa State University Provost Office.

Hargrave, C.P., (2012, October). Marshalltown Science Bound at Steady State. Iowa State University Science Bound.

Hargrave, C. P., (2012, October). Mentoring Circles: Effectively and Efficiently Connecting Minority Youth with STEM Professionals. Iowa State University Science Bound.

Hargrave, C.P., Romero, D.E., and Rollins, A., (2012, September). Marshalltown Science Bound Project 2011-12. Report to Corporate Sponsors.

Hargrave, C.P., and Romero, D.E., (2012, August). Denison Science Bound Project 2011-12. Report to the Smithfield-Luter Foundation.

Hargrave, C. P., (2012, August). Rituals and Traditions that Engage Ethnic Minority Students and Families in Informal STEM Education. Iowa State University Science Bound.

Hargrave, C. P. and Rollins, A.D., (2012, July). Science Bound Annual Report FY12. Project Report to the Iowa State University Provost Office.

Hargrave, C. P., (2011, October). Assessment of the Marshalltown Science Bound Program on Participants, Families, and Community. Report to the Martha Ellen Tye Foundation Board.

Hargrave, C. P. and Wade, A. (2011, October). Twenty Years to Grow a Scientist: Historical Overview of Iowa State University Science Bound. Iowa State University Science Bound.

Hargrave, C.P., Romero, D.E., and Rollins, A., (2011, September). Marshalltown Science Bound Project 2010-11. Report to Corporate Sponsors.

Hargrave, C.P. and Jefferies-El, M., (2011, August). Chem Ambassadors: Developing Peer Relationships Among STEM Undergraduates and Pre-college Students. Report to The Camille & Henry Dreyfus Foundation.

Hargrave, C.P. and Romero, D.E. (2011, August). Denison Science Bound Project 2010-11. Report to the Smithfield-Luter Foundation.

Hargrave, C. P. and Rollins, A.D., (2011, July). Science Bound Annual Report FY11. Project Report to the Iowa State University Provost Office.

Hargrave, C.P. and Romero, D.E. (2011, June). Hostmanship: Engaging ethnic minority students and families in academic pursuits. Iowa State University Science Bound.

Hargrave, C.P., Romero, D.E., and Rollins, A., (2010, September). Marshalltown Science Bound Project 2009-10. Report to Corporate Sponsors.

Hargrave, C.P., and Romero, D.E. (2010, August). Denison Science Bound Project 2009-10. Report to the Smithfield-Luter Foundation.

Hargrave, C. P. and Rollins, A.D., (2010, July). Science Bound Annual Report FY10. Project Report to the Iowa State University Provost Office.

Hargrave, C.P., (2010, January). Asset-based Approaches to Engaging and Equipping Students for STEM Education. Iowa State University Science Bound.

Hargrave, C. P., (2009, December). When You are Not the Leader They Expect: Building Successful Community Partnerships that Transcend Cultural Boundaries. Iowa State University Science Bound.

Hargrave, C.P., Romero, D.E., and Rollins, A., (2009, September). Marshalltown Science Bound Project 2008-09. Report to Corporate Sponsors.

Hargrave, C.P., and Romero, D.E. (2009, August). Denison Science Bound Project 2008-09. Report to the Smithfield-Luter Foundation.

Hargrave, C.P., (2009, August). Writing to Reflect and Internalize STEM Academic Aspirations. Iowa State University Science Bound.

Hargrave, C. P. and Rollins, A.D., (2009, July) Science Bound Annual Report FY09. Project Report to the Iowa State University Provost Office.

Hargrave, C. P., (2009, June). And all the teachers shouted “Yes they can!”: Making Science Fair Projects a Key Component of a pre-college STEM Education Program. Iowa State University Science Bound.

Hargrave, C.P., (2008, September). 180 Degrees: Empowering White Teachers to Expect More from Brown and Black Students. Iowa State University Science Bound.

Hargrave, C.P., Romero, D.E., and Rollins, A., (2008, September). Marshalltown Science Bound Project 2007-08. Report to Corporate Sponsors.

Hargrave, C.P., and Romero, D.E. (2008, August). Denison Science Bound Project 2007-08. Report to the Smithfield-Luter Foundation.

Hargrave, C. P., (2008, July). Paying students to learn mathematics in the summer: Learn & Earn program structure and instructional approaches. Iowa State University Science Bound.

Hargrave, C. P. and Rollins, A.D., (2008, July). Science Bound Annual Report FY08. Project Report to the Iowa State University Provost Office.

Hargrave, C. P. and Rollins, A.D., (2007, July). Science Bound Annual Report FY07. Project Report to the Iowa State University Provost Office.

Hargrave, C.P., (2007, January). Transitioning Marshalltown from a Pilot Project to a Full Science Bound Program. Iowa State University Science Bound.

Hargrave, C. P. and Rollins, A.D., (2006, July). Science Bound Annual Report FY06. Project Report to the Iowa State University Provost Office.

Hargrave, C. P. and Sasser, S., (1999, June). Participant Perspectives of Science Bound. Report to Iowa State University Science Bound.

Hargrave, C. P. and Taylor, K.A., (1998, June). Participant Perspectives of Science Bound. Report to Iowa State University Science Bound.

Hargrave, C. P. (1997, June). Participant Perspectives of Science Bound. Report to Iowa State University Science Bound.

Hargrave, C. P. (1996, June). Participant Perspectives of Science Bound. Report to Iowa State University Science Bound.

INTERNATIONAL & NATIONAL SCHOLARLY PRESENTATIONS AND WORKSHOPS

International & National Presentations and Workshops

Jefferies, R., Dade, K., **Hargrave, C.P.**, & Tartakov, C., (2016, November). Fortudinous Femininity: Black Female Academics Negotiating Race & Gender through Sisterhood and Prayer. Workshop presented at the Annual Meeting of the National Association of Multicultural Education, Cleveland, OH.

Rollins, A. D. & **Hargrave, C. P.** (2015, November). Qualitative Examination of Black Parent's Academic Social Capital in an Urban School. Paper presented at the Annual Meeting of the National Association of Multicultural Education, New Orleans, LA.

Hargrave, C. P. & Rollins, A.D. (2015, November). Counter spaces: Analysis of after-school educational structures that foster success narratives of students of color. Paper presented at the Annual Meeting of the National Association of Multicultural Education, New Orleans, LA.

Dade, K., Tartakov, C., Leigh, P., & **Hargrave, C.P.** (2014, November). Crossing to Advancement in the Academy: Black Female Faculty Experiences. Paper presented at the Annual Meeting of the National Association of Multicultural Education, Tucson, AZ.

Hargrave, C.P. & Rollins, A.D. (2014, November). The Invisible Frontera: Families of Color, Social Capital, and Interaction with Schools. Paper presented at the Annual Meeting of the National Association of Multicultural Education, Tucson, AZ.

Hargrave, C.P. & Kemis, M.R. (2012, November). Influence of the Young Engineers and Scientists Program for Underrepresented Minority High School Students' Knowledge and Career Aspirations in STEM Fields. Paper presented at the International Conference on Science in Society, Berkeley, CA.

Hargrave, C.P. & Habeger, R. (2012, November). Building Community for STEM Learning: SCIENCE BOUND - STEM Corporations, K-12 Schools, & University. Paper presented at the Association of American Colleges and Universities Next Generation STEM Learning Conference, Kansas City, MO.

Hargrave, C.P. (2011, November). Impact of an informal STEM education program on rural students of color. Paper presented at the annual meeting of the National Association for Multicultural Education, Chicago, IL.

Hargrave, C.P. (2011, March). Integrating Technology and Multicultural Preparation: Preservice Teachers' Implementation of Technology-based Writing Workshop for Ethnically Diverse Students. Paper presented at the annual conference of the Society for Information Technology & Teacher Education, Nashville, TN.

Hargrave, C., Chace, C. & Jung, A. (2010, March). Using an experiential learning approach to prepare pre-service teachers to teach online. Paper presented at the annual conference of the Society for Information Technology & Teacher Education, San Diego, CA.

Correia, A.P., **Hargrave, C.P.**, Leigh, P., Michelini, C., Schmidt, D., & Thompson, A. (2009, July). The Making of an Online Masters Program in the North American Context. Paper presented at the 9th IFIP TC3 World Conference in Education, Bento Goncalves, Brazil.

McShay, J., Leigh, P. R. & **Hargrave, C. P.** (2007, April). Equity Pedagogy in Technology Teacher Education: Implementation and Conceptual Analysis of a Double Infusion Model. Paper presented at the annual conference of the American Educational Research Association, Chicago, IL.

Heer, R. & **Hargrave, C.P.** (2007, March). My Space in College: Students use of Virtual Communities to Define their Fit in Higher Education. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education, San Antonio, TX.

Sadera, W.A. & **Hargrave, C.P.**, (2004, March). Applying Conceptual Change Theory to the Technology Preparation of Preservice Teachers. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education, Atlanta, GA.

McGregor, L. & **Hargrave, C.P.**, (2003, March). What is possible? Real-time Science Tools for K-12 Tele-Experimentation. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education, Albuquerque, NM.

Frizelle, T. , **Hargrave, C.** , Andre, T., & Chumbley, S., (2002, March). On-line Microscopes & Inquiry-based Science Instruction: Improving Technology in Teacher Education. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education, Nashville, TN.

Rollins, A., **Hargrave, C.P.**, Allen-Sommerville, L., & Trahanovsky, K. (2001, October). Science Bound: A Team Approach to Increasing Campus Diversity at a Majority Institution. Paper presented at the American Council on Education Conference on Diversity in Postsecondary Education, Cincinnati, OH.

Hargrave, C., Andre, T., Chumbley, S., & Constant, K., (2001, June). On-line Microscope & Inquiry-based Science Instruction: Improving Science Teacher Education. Paper presented at the National Educational Computing Conference, Chicago, IL.

Sadera, B. & **Hargrave, C.** (2001, March). Conceptual Change-based Instruction in Preservice Teacher Technology Preparation. Paper presented at the annual meeting of the Society for Information Technology & Teacher Education, Orlando, FL.

Chumbley, S., **Hargrave, C.**, & Constant, K. (2000, June). Project ExCEL - Web-based SEM for K-12 Education. Paper presented at the American Society of Engineering Education Conference, St. Louis, MO.

Flickinger, K.I. & **Hargrave, C. P.** (2000, February). Case Study for Students' Learning Experiences in an Internet-based College Science Course. Poster session presented at the International Conference on Mathematics/Science Education & Technology, San Diego, CA.

Flickinger, K.I. & **Hargrave, C. P.** (2000, February). College Science via Internet: How Effective is it? Paper presented at the International Conference on Mathematics/Science Education & Technology, San Diego, CA.

Hargrave, C. P., Foegen, A., & Schmidt, D. (2000, February). Teacher Educators' Reflections on Using Group Response Technology. Paper presented at the Society for Information Technology & Teacher Education, San Diego, CA.

Thompson, A., Schmidt, D., Nonis, A., **Hargrave, C. P.**, & Willis, J. (2000, February). Technology Collaboration for Simultaneous Renewal in Teacher Education: A PT3 Project. Panel presentation at the Society for Information Technology & Teacher Education, San Diego, CA.

Hargrave, C. P., Yarger, D.N., Marlino, M., & Taber, M. (2000, February). Who's Teaching Your Science Teachers? The Role of the Liberal Arts & Sciences Colleges in Preparation of Science Teachers. Panel presentation at the Society for Information Technology & Teacher Education, San Diego, CA.

Hargrave, C. P. & Sadera, W.A. (2000, February). Preservice Teachers' Beliefs about Effective Uses of Computers in the Classroom: A Content Analysis of Narratives. Paper presented at the Society for Information Technology & Teacher Education, San Diego, CA.

Michelini, C., **Hargrave, C. P.**, Pease, L., & Yarger, D. (2000, February). Exploring Preservice Teachers' Professional Development through their Creation of Web-based Science Learning Environments. Poster session at the Society for Information Technology & Teacher Education, San Diego, CA.

Foegen, A., **Hargrave, C.P.**, & Schmidt, D. (2000, January). Do You Know What I Know? Group Response Technology in Teacher Education. Paper presented at the Council for Exceptional Children Technology Access Conference, Milwaukee, WI.

Wang, H.S., **Hargrave, C. P.**, & Hsu, Y.S., (1999, March). Examining the Use of Different Teaching and Learning Strategies in Computer Courses for Inservice Education. Paper presented at the annual meeting of the Society for Information Technology in Teacher Education, San Antonio, TX.

Kenton J. & **Hargrave, C.P.** (1998, June). Implications of Preinstructional Simulations for Science Teaching. Poster session at the National Educational Computing Conference, San Diego, CA.

Flickinger K. & **Hargrave, C.P.** (1998, June). Teaching College Science Courses via the Internet. Poster session at the National Educational Computing Conference, San Diego, CA.

Hargrave, C. P. & Foegen, A. (1998, March). Giving Every Student a Voice: Enhancing Group Instruction Teacher Education via Technology. Poster session at the annual meeting of the Society for Information Technology in Teacher Education, Washington, D. C.

Hargrave, C. P. & Taylor, K. A. (1998, March). Groupware: Transitioning for Didactic to Constructivist Instruction in Teacher Education. Poster session at the annual meeting of the Society for Information Technology in Teacher Education, Washington, D. C.

Kenton, J. M. & **Hargrave, C. P.** (1998, March). Preparing for Conceptual Change: A Middle School Science Electricity Simulation. Paper presented at the annual meeting of the Society for Information Technology in Teacher Education, Washington D. C.

Topp, N., Grandgenett, N., Mortenson, R., Ostler, E., & **Hargrave, C. P.** (1998, March). Project TEAM: A Collaborative Internet Inservice Model. Paper presented at the annual meeting of the Society for Information Technology in Teacher Education, Washington D. C.

Kenton, J. M. & **Hargrave, C. P.** (1998, February). Implications of Pre-instructional Simulations for Teachers and Teaching. Paper presented at the annual meeting of the American Association of Colleges of Teacher Education, New Orleans, LA.

Sadera, W. A. & **Hargrave, C. P.** (1998, February). Preservice Teachers' Preconceptions about the Role of the Computer in Learning and Teaching. Paper presented at the annual meeting of the American Association of Colleges of Teacher Education, New Orleans, LA.

Hargrave, C. P. & Hsu, Y.S. (1997, February). Survey of Introductory Instructional Technology Courses at 88 Universities. Paper presented at the annual meeting of the Society for Information Technology in Teacher Education, Orlando, FL.

Hargrave, C. P. & Thompson, E. A. (1995, February). TEAMS: Partnering with Scientists and Expert Teachers to Better Prepare Elementary Math and Science Educators. Paper presented at the annual meeting of the American Association of Colleges of Teacher Education, Washington D.C.

Hargrave, C. P. (1995, February). Using Supercomputers to Enhance Minority Students' Mathematics Skills and Attitudes. Paper presented at the annual meeting of the Association for Educational Communications and Technology, Anaheim, CA.

Hargrave, C. P. (1995, June). Developing Students' Spatial Reasoning Skills via Supercomputers. Poster session at the National Educational Computer Conference, Baltimore, MD.

Hargrave, C. P. (1994, April). Computer Simulations, Reflective Journals, Peer Group Interaction and Conceptual Change about Electricity with Preservice Teachers. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Hargrave, C. P., Simonson, M. R., & Thompson, A. D. (1993, January). Evaluation & Implementation of a University Computer System: The Use of Qualitative and Quantitative Data. Paper presented at the annual meeting of the Association for Educational Communication & Technology, New Orleans, LA.

Invited Presentations and Workshops

Hargrave, C.P. (2010, April). Attracting Students to Science, Technology, Engineering, and Math (STEM) Fields. Paper presented at Preparing Tomorrow's Transportation Workforce: A Midwest Summit. Iowa State University.

Hargrave, C.P. (2009, August). Distance Education Course Development Techniques. Paper presented at Educational Technologies and Distance Education: International Seminar & Panel on Distance Education, CECIERJ (Center for Science and Higher Education at a Distance in Rio Janeiro), Brazil.

Hargrave, C. P. (2007, May). Technology & Learning: Opportunities Our Students Can't Afford to Miss. Paper presented at Dillard University Faculty Convocation. New Orleans, LA.

Boysen, P., Yarger, D.N., **Hargrave, C. P.**, & Pease, L. (1999, November). Experiences with Tools for Better Learning in a Large Introductory Science Course. Software demonstration at the Sigma Xi forum Reshaping Undergraduate Science and Engineering Education: Tools for better learning, Minneapolis, MN.

Yarger, D.N., **Hargrave, C. P.**, & Thomas, R. (1999, October). Learning to Teach while Learning to Learn: Reaping the Benefits of Investing in Tomorrow's Teachers. Software demonstration at the Annual Meeting of the Geological Society of America, Denver, CO.

Boysen, P., Yarger, D.N., **Hargrave, C. P.**, Pease, L., & Thomas, R. (1999, May). Modeling the Use of New Technologies to Promote SMET Learning and Impact Teacher Preparation. Software demonstration given at NSF Teacher Education PI workshop: From Preparation to Practice, Washington, D.C.

Hargrave, C. P. & Thomas, R. (1998, May). Technology and Pedagogical Change: A Vision for Education in the United States. Workshop presented at the Institute of Secondary School Teachers, Taipei, Taiwan.

Hargrave, C. P. (1993, May). Ensuring Success: Strategies to Help Women Earn Graduate Degrees in the Physical Sciences. Panel session at the Department of Energy Review of Programs for Women, Oak Ridge, TN.

Hargrave, C. P. (1993, February). Department of Energy Partnerships with Historically Black Colleges and Universities. Paper presented at the Opportunities for Louisiana: Research & Education Opportunities for Louisiana Historically Black Colleges & Universities & Precollege Communities, (sponsored by Southern University, Senator J. Bennett Johnston, & U.S. Department of Energy.) Baton Rouge, LA.

REGIONAL AND STATE PRESENTATIONS AND WORKSHOPS

Hargrave, C.P. (2012, December). Tapping into STEM Learning Potential at the Middle Grades. Invited presentation given to the Educational Leadership Initiative Board of the United Way of Central Iowa, Des Moines, IA.

Wade, A. & **Hargrave, C.P.**, (2011, March). SCIENCE BOUND: A Historical Analysis of ISU's Effort to Increase Minority Students' Participation in STEM. Paper presented at the annual Iowa State Conference on Race and Ethnicity, Ames, IA.

Hargrave, C. P., (2011, February). The Power of Diversity: Black History and Our Collective Future. Paper presented at the Department of Veterans Affairs Central Iowa Health Care Systems, Des Moines, IA.

Correia, A.P., **Hargrave, C.P.**, Leigh, P., Michelini, C., Niederhauser, D., Schmidt, D., and Thompson, A. (2009, October). Online Master's of Education in Curriculum & Instructional Technology. Paper presented at annual meeting of Iowa Technology in Education Connection Conference, Iowa City, IA.

Hargrave, C.P. and Romero, D.A., Building Local Students' Capacity to Excel In STEM. (2009, April). Paper presented at the Marshalltown Rotary Club Meeting, Marshalltown, IA.

Hargrave, C.P. (2003, April). Embracing Student Leadership. Invited speaker at Lindenwood University, St. Louis, MO.

Frizelle, T. **Hargrave, C.**, & Chumbley, S. (2001, October). Co-laboratories: Doing Science on the Internet. Workshop presented at the annual meeting of the Iowa Technology in Education Conference, Des Moines, IA.

Hargrave, C. (2001, October). If Technology is the Answer, was Learning Ever a Part of the Question? Paper presented at the Springbrook Conference on Teaching in Higher Education, Springbrook, IA.

Hargrave, C.P., Chumbley, S. & Constant, K. (1999, April). Placing Powerful Scientific Tools in the Hands of K-12 Students. Paper presented at the annual meeting of the Iowa Academy of Science, Ames, IA.

Hargrave, C. P. (1998, November). Lessons Learned from Science Bound: Helping Your Young Adult Succeed Academically. Paper presented to parents of Science Bound participants, Des Moines, IA.

Thompson, A.D., & **Hargrave, C. P.** (1996, October). Using Data Base and Spreadsheet Applications Across the Curriculum. Workshop presented at Waverly-Shellrock School District, Waverly, IA.

Schmidt, D., Thompson, A.D., **Hargrave, C. P.**, Topp, N., & Cronin, B. (1995, October). Moving towards Integration: Exploring Educational Uses of Computers. Workshop presented at Waverly-Shellrock School District, Waverly, IA.

Hargrave, C. P. (1994, April). Educational Equity through Technology. Invited paper presented at the National Education Association Regional Technology and Diversity Conference, Albuquerque, NM.

STEM OUTREACH CURRICULUM DEVELOPMENT PRODUCTS (teacher-reviewed & tested)

How to Apply for A Summer Internship Instructional Video – 3- week instructional unit to assist high school students in preparing effective applications for internships. (2013, January). Iowa State University Science Bound.

STEM Mentoring Circles - 4-week series of interactions for small groups of high school youth and 1-2 STEM professionals. (2012, July). Iowa State University Science Bound.

Countdown to College Interactive Workshop Series – 8 sessions for 1st generation college students and parents to learn about and engage in the college admissions, registration, and enrollment process. (2009, September). Iowa State University Science Bound.

STEM Career Explorations Projects - 4-week instructional unit to assist precollege students to investigate, job shadow, reports and reflect on STEM careers. (2009, August). Iowa State University Science Bound.

STEM Experiences and Aspirations Writing Workshop – formal thesis development and reflective writing workshop for 8th grade students wanting to advance to Science Bound High School Program. (2009, March). Iowa State University Science Bound.

Student Oral Justifications - grade-based instructional unit to increase individual student accountability for learning in informal STEM education experiences and develop formal presentation and communication skills. (2009, March). Iowa State University Science Bound.

Catalysts Student Leadership Program - bi-monthly training focused on peer leadership and mentoring for high school students. (2008, September). Iowa State University Science Bound.

Science Bound Basics – series of object lessons on attitudes, dispositions, actions, and in-school and out-of-school behaviors expected of Science Bound students. Includes code of conduct, classroom readiness acrostics, ritual chants, mottos, and hands-on activities to build community and foster STEM educational engagement. (2008, July). Iowa State University Science Bound.

Science Bound 8th Grade Curriculum - 6-month curriculum to develop students' ethic of achievement in STEM and academics. (2007, August). Iowa State University Science Bound.

Science Bound Kick-Offs - instructional program that engages students, parents, and teachers in formal and informal STEM education to begin school year. (2007, August). Iowa State University Science Bound.

CONSULTATIONS AND RESEARCH/ DEVELOPMENT PROJECTS

Instructional Developer, Paws of Life Foundation, (July 2010 – December, 2014). Design and develop online courses for the Working K9 Handler Academy. Courses provide training for search and rescue canine handlers. Ames, IA.

Research Associate and Consultant, Two Rivers Marketing, (July 2008 – June 2009). Provided survey development and data analysis and reporting for corporate customer satisfaction measures. Des Moines, IA.

Instructional Developer, ISU Science Bound Teacher Professional Development. Designed and implemented teacher professional development sessions fostering cultural competence and cultivating an ethic of achievement among Latino and African American students. (January 2007 – August 2010).

Instructional Developer and Consultant, Partnership for Economic Progress Inc. (March 2003 – September, 2006). Developed curriculum and long-term instructional strategic plans for collaborations between community-based, extra-curricular academic programs and Iowa colleges and universities. Des Moines, IA.

Instructional Developer, Demonstratives Inc. (August, 2001-February, 2002). Produced instructional framework to guide the development of engineering-based animations of vehicle dynamics; Ames, IA.

Program Evaluator, Science Bound Program Evaluation. (1996, 1997, 1998 & 1999). Development and administration of instruments to measure impact of extra-curricular program on minority students' program engagement and persistence.

Instructional Developer, DYNEX Digital. (October 1995-August, 1997). Designed and produced compact disc-interactive training system for U.S. Forest Service, Des Moines, IA.

Evaluator, University of Nebraska at Omaha Project TEAM. (May, 1996 - November, 1996). Assessed the impact of Technology in Education Advancement Model to prepare teachers to use internet resources in Nebraska schools, Omaha, NE.

Consultant, Princeton Plasma Physics Laboratory. (March 1994-December 1996). Recommended directions for the development of technology-based science education programs for high schools, Princeton, NJ.

Consultant, WQED/TV Pittsburgh. (January, 1993-October, 1997). Reviewed scripts and treatments for instructional video series illustrating the role of mathematics in careers, Pittsburgh, PA.

PROFESSIONAL SERVICE AND AFFILIATIONS

National Association for Multicultural Education, 2011-present

International Society for Technology in Education (ISTE), member, 1990 – 2007.

Technology and Equity SIG Steering Committee Member, 2010 – 2013

American Association of Colleges of Teacher Education (AACTE), member, 1994-2002.

Association for the Advancement of Computing in Education (AACE), member, 1994-present.

HONOR SOCIETIES AND AWARDS

Impact Award, Iowa State University Alumni Association, 2017

Iowa State University College of Human Sciences, Career Achievement in Outreach, 2014

Iowa State University Martin Luther King Jr. Advancing One Community Faculty Award, 2014

2013 Excelencia in Education Honorable Mention - Science Bound – baccalaureate level (national recognition for program effectiveness in accelerating Latino student success)

Iowa State University, College of Human Sciences, Faculty Diversity Enhancement Award, 2011

Wakonse Teaching Fellow, 2000, 2004

Iowa State University Foundation Early Achievement in Teaching Award, 1998

Kappa Delta Pi, Honor Society, chapter advisor, 1996-1999

Phi Kappa Phi Honor Society, member

Phi Delta Kappa, Education Fraternity, member

IOWA STATE UNIVERSITY STEM EDUCATION COMMITTEES

IINSPIRE LSAMP Advisory Board (2010-2013)

ISU STEM Hub Advisory Group (2012 – 2014)

IPRT Center Directors (2008 - 2014)

ADVANCE Council Member (2009 – 2012)

SEEC Institutional Advisory Council Member (2008-2012)

ISU Early Outreach Program Coordinating Council (2006 – 2015)

RECENT SERVICE TO PROFESSION

Journal of Negro Education, manuscript reviewer (2015 – present)

Conference Paper Reviewer, National Association of Multicultural Education (2013 – present)

Des Moines Central Campus Advocacy Committee Oct. 2012 - present

Iowa Governor's STEM Advisory Council –STEM For All workgroup member (2010- 2012)

U.S. Department of Energy, Office of Science Education. Proposal Reviewer, (2010, 2011)
Serve as academic reviewer for instructional technology and science education projects
submitted for funding through U.S. Department of Energy.

Research Paper Reviewer, Emerging Technology Conference 2011. Regional Conference
on Human Computer Interactions. Ames, IA.

COMMUNITY LEADERSHIP

United Way of Central Iowa Volunteer, 2015 - 2016
Ames Boys & Girls Club, Board of Directors, September, 2007 – 2014
Ames Community Schools Diversity Taskforce, October, 2001- 2009
Ames Community Schools Technology Committee, September, 2000 – 2004
City of Ames Human Relations Committee -Dialogues about Diversity, September, 2000 – 2003
American Cancer Society Volunteer, 1996-1998; 2000-2002
Homeward Meals on Wheels Delivery Person, 1996-1998
Iowa Alzheimer's Association, Newsletter Editor, 1996-1997
Ames Parks & Recreations, Girls Softball Coach, 1993 & 1995