

1. ACADEMIC HISTORY

Name: John M. Mativo

Present Rank: Assistant Professor

Proportion Time Assignments: .45(EFT) Instruction; .30 (EFT) Research

Tenure Status: Tenure-Track

Graduate Faculty Status: Graduate Faculty – appointed 2007 – 2014

Degrees: *Doctor of Education*- The University of Georgia (UGA), Athens, GA, 1993

Master of Science in Mechanical Engineering- The University of Dayton, Dayton, OH, 2006

Master of Education – UGA, Athens, GA, 1990

Bachelor of Mechanical Engineering – Auburn University, Auburn, AL. 1995

Bachelor of Industrial Technology – Andrews University, MI (University of Eastern Africa, Baraton. Campus [UEAB]), 1988

Bachelor of Arts [Theology] – Andrews University, MI (UEAB campus), 1987

Certified Senior Industrial Technologist – National Association of Industrial Technology; Ann Arbor, MI. 2006- 2009.

Academic Positions Held:

2007 – present	Assistant Professor; Department of Workforce Education, leadership, and Social Foundations; College of Education; The University of Georgia; Athens, GA.
2005-2007	Associate Professor; Department of Technological Studies; Getty College of Arts and Sciences; Ohio Northern University; Ada, OH. Received Tenure 2007.
2002-2005	Assistant Professor; Department of Technological Studies; Getty College of Arts and Sciences; Ohio Northern University; Ada, OH.
1996 – 2001	Senior Lecturer (Associate Professor) and department Chair; Department of Technology; School of Science and Technology; University of Eastern Africa, Baraton; Kenya

1995 – 1996 Lecturer; Department of Technology; School of Science and Technology;
University of Eastern Africa, Baraton; Kenya.

Other Professional Employment

- 1993-1995 Student Research Assistant; department of Mechanical Engineering;
College of Engineering; Auburn University; Auburn, AL.
- 1990 – 1993 Graduate Assistant; Department of Trade and Industrial Education;
College of Education; The University of Georgia; Athens, GA.
- 1988 – 1990 Graduate Assistant; Vocational Education Materials Center; College of
Education; The University of Georgia; Athens, GA.
- 1986 – 1988 Workshop and Garage Manager; Department of Industrial Technology;
University of Eastern Africa, Baraton. Kenya
- 1986 – 1987 Sales Representative; Skandinaviska Bokforlaget; Stockholm; Sweden
- 1982-1986 Dairy and Farm Worker; Department of Agriculture; University of Eastern
Africa, Baraton. Kenya
- 1980- 1982 Secondary School Instructor; Mombasa Seventh-Day-Adventist School,
Mombasa, Kenya.

2. INSTRUCTION

Courses Taught – The University of Georgia

Course	Course Title	Semester	# Enrolled
ETES 5090/7090	Principles of Technology	Fall 2007	10

Courses Taught – Ohio Northern University (Undergraduate 2002 – 2007)

- Senior Capstone
- Internship in Technology
- Independent Study
- Energy and Transportation
- Advanced Robotics and Automation
- Nonmetallic Materials and Processes
- Introduction to Communication Technology
- Product Manufacturing
- Metallic Materials and Processes I
- Student Teaching Seminar in Technology
- Organization and Methods of Teaching Technology
- Strategies for Technology Education
- Advised and supervised 11 students in 4 senior projects in Robotics and
Automation
- Supervised 12 student teaching interns

- Supervised 4 students in professional practice

Courses Taught – University of Eastern Africa, Baraton (Undergraduate 1995-2001)

- Power Technology
- Engines I & II
- Automotive Electricity & Electronics
- Suspension and Power Train
- Suspension and Alignment
- Engine Performance
- Automotive Diesel
- Fundamentals of Electricity
- Fundamentals of Electronics (DC)
- Circuit Analysis (AC)
- Industrial Economics
- Mechanical Drawing
- Welding I
- Thermodynamics
- HVAC
- Supervised over 50 senior projects in Automotive and Electronics majors

Courses Taught – University of Eastern Africa, Baraton (Graduate 1999-2001)

- EDRS 602: Research Methods and Statistics
- Major professor to Masters Student [1]
- Member Thesis Committee
- Member Master's Committee

Courses Taught – The University of Georgia 1991 – 1993)

- Supervised over 30 New Teachers Institute interns
- Prepared materials for Technology laboratories as needed

3. SCHOLARLY ACTIVITIES

* *Peer Reviewed.* ** *Invited.*

Books Authored or Co-Authored: None

Books Edited or Co-Edited:

Chapters in Books:

* ** Mativo, J. M. (2006). *Clean American Fuels. Eleventh Grade.* Ohio Department of Education Model Lessons: Columbus, OH.

http://ims.ode.state.oh.us/ODE/IMS/Lessons/Content/CTE_LP_S01_BC_L11_I0101.doc

* ** Mativo, J. M. (2006). *Interdisciplinary Lesson: Technology Tradeoffs: Why Should I care. Ninth Grade.* Ohio Department of Education Model Lessons: Columbus, OH.

http://ims.ode.state.oh.us/ODE/IMS/Lessons/Content/CTE_LP_S02_BA_L09_I0101.doc

* ** Mativo, J. M. (2006). *Interdisciplinary Lesson: Beep Beep Zoom: Relationships among Technologies. Second Grade.* Ohio Department of Education Model Lessons: Columbus, OH. http://ims.ode.state.oh.us/ODE/IMS/Lessons/Content/CTE_LP_S01_BC_L02_I0201.doc

* ** Mativo, J. M. (2006). *Interdisciplinary Lesson: Series and Parallel Electric Circuits. Eleventh Grade.* Ohio Department of Education Model Lessons: Columbus, OH. http://ims.ode.state.oh.us/ODE/IMS/Lessons/Content/CTE_LP_S07_BA_L11_I0301.doc

Monographs: None

Journal Articles (Electronic)

* Mativo, J. M. & Stienecker, A. (2007).). Proceedings of the 2007 American Society for Engineering Education Annual Conference & Exposition. AC 2007-730: *Innovative Exposure to Engineering Basics through Mechatronics Summer Honors Program for High School Students.* Honolulu, HI. June 24 - 27, 2007. http://www.icee.usm.edu/ICEE/conferences/asee2007/papers/730_INNOVATIVE_EXPOSURE_TO_ENGINEERING_BASIC.pdf

Stienecker, A.

* Mativo, J. M. & Sirinterlikci, A. (2006). Proceedings of the 2006 American Society for Engineering Education Annual Conference & Exposition. *Summer Honors Institute for the Gifted.* Chicago, IL. June 18 – 20, 2006. <http://www.asee.org/conferences/v2searchResults.cfm?searchMode=author&searchText=Mativo&search=Search&searchYears=2006>

* Mativo, J. M. & Sirinterlikci, A. (2005). *Pedagogy in Teaching Manufacturing Engineering.* Society of Manufacturing Engineers Technical paper. SME Identification Product ID: TP05PUB238 <http://www.sme.org/cgi-bin/get-item.pl?TP05PUB238&2&SME&>

* Mativo, J. M. & Sirinterlikci, A. (2005). 35th ASEE/IEEE Frontiers in Education Conference. *Teaching Complex Product Design with Art.* FIE. Indianapolis, IN. October 19-22. # F3H-13. <http://fie.engrng.pitt.edu/fie2005/papers/1064.pdf>

* Mativo, J. M. & Sirinterlikci, A. (2005). Proceedings of the 2005 Materials Science & Technology Annual Conference & Exposition. *What makes a Good Materials Learning Experience in a Technology Program?* Pittsburgh, PA. September 25 – 28. Pages 81 – 91.

* Mativo, J. M. (2005). Proceedings of the 2005 American Society for Engineering Education Annual Conference & Exposition. *Curriculum Development in Industrial Technology: Materials Science and Processes.* Portland, OR. June 12 -15. #2647. http://www.asee.org/acPapers/2005-746_Final.pdf

* Mativo, J. M. & Sirinterlikci, A. (2005). Proceedings of the 2005 American Society for Engineering Education Annual Conference & Exposition. *A Cross-Disciplinary Study via Animatronics.* Portland, OR. June 12 - 15. #3547. http://www.asee.org/acPapers/2005-1579_Final.pdf

* Mativo, J. & Sirinterlikci, A. (2004). 34th ASEE/IEEE Frontiers in Education Conference. *Work in Progress. A 6-12 Initiative for integrated study of Engineering Sciences,*

Technologies & Art. Savannah, GA. S3D-16 [1178]
<http://fie.engrng.pitt.edu/fie2004/papers/1178.pdf>

Journal Articles (Paper)

- * Mativo, J. M. & Sirinterlikci, A. (2005). *A Novel Approach in Integrating Product Design in Curriculum: Toy and Entertainment Animatron Design*. Journal of Manufacturing Systems. SME Vol. 24 (3). pp. 194 – 200.
- * Mativo, J. M. (2005). TechDirections. *Preparation of an Industrial Technology Teacher and Administrator for a Developing Country*. December pp. 22 – 25
- * Mativo, J. M. (2005). TechDirections. *Wood Education: A comprehensive Approach for Curriculum Integration*. February, pp 24- 26.

Bulletin or Reports:

Abstracts: None

Book Reviews:

Technical Reports:

Any Other:

Grants Received:

- \$63,500 (2007). Part of Summer Honors Institute: Ohio Department of Education
 - \$50,000 (2006). Part of Summer Honors Institute: Ohio Department of Education and Ohio Northern University. Mechatronics Curriculum. (Summer 2006).
 - \$ 4,500 (2005) From Ohio Northern University Teaching with Technology Initiative.
 - \$500 (2005) Sally Ride Foundation in Kind for ToyChallenge
 - \$2,000 (2004) in Kind – World in Motion from Society of Automotive Engineers
 - \$ 136,409 Part of Summer Honors Institute: Ohio Department of Education and Ohio Northern University. Participated in the Animatronics Curriculum (Summer 2005). 20%.
 - \$350 (July 2, 2004) National Association of Industrial Technology (NAIT). 2003-2004 NAIT University Division Mini-grant.
 - \$ 1,500 (2004) Ohio Northern University Summer Development Grant Proposal: Development of Metallic and Nonmetallic Materials Laboratory for Technology Curriculum.
 - \$ 500 (2004) Ohio Northern University Summer Development Grant Proposal: Development of Metallic and Nonmetallic Materials Laboratory for Technology Curriculum.
 - \$45,000 (In kind - 2003), Three injection molds (\$15,000 each) from Innoplas Corporation.
 - \$500 (November 21, 2003) Alvin Rudisill – Epsilon Pi Tau Scholarship Award.
- \$ 55,000.00 (1998 – 2001) for Technology Department Building Expansion – Electronics and Automotive at UEAB

Grants Submitted, Not Funded:

- 300,000. (2006) From National Science Foundation (05-621) Information Technology Methods in STEM Curriculum (ITMSTEMC). Mativo, J. – Principal Investigator, Stienecker, A. Co-PI.
- \$ 361,620 (2005) From National Science Foundation (04-611): Integrated Study of Engineering Sciences, Technologies, and Art via Animated Toys and Robots. Submitted. Mativo, J. – Principal Investigator (PI), Sirinterlikci, A. Co-PI.
- \$100,000 (2005) From Hewlett Packer: HP Technology for Teaching Grant Initiative – 2005 Higher Education Edition. [Mativo, J. M. & Jao, F.] Co-PI.
- \$ 39,367 (2004) From Coca-cola Foundation. [Mativo, J. M. & Sirinterlikci, A.]Co-PI.
- \$ 300,000 (2004) From National Science Foundation (02-147): Integrated Study of Engineering Sciences, Technologies, and Art via Animated Toys and Robots. –Mativo, J. M. – PI, Sirinterlikci, A. Co-PI.
- \$15,000 (2004) Martha Holden Jennings Foundation, Cleveland, OH. – Mativo, J. M. PI, Sirinterlikci, A. Co-PI.

Recognitions and Outstanding Achievements:

- Sigma Xi: Science Research Honorary Society, 2004
- Epsilon Pi Tau: International Honorary for Professions in Technology, 2003
- Phi Kappa Phi: Honor Society for Academic Excellence, 1992
- Phi Beta Delta: Honor Society for International Scholars, 1992
- Dean's List – Masters of Science in Mechanical Engineering, 3rd Term 2006

Areas of Research:

Education – teaching and learning issues in technological studies. Examples:

- *Recommendation for General Engineering Preparation in High School - An Ohio Engineer Educator and Students Perspective;*
- *Perceptions of superintendents in Ohio on the Role of Technology Education;*
- *Societal Differences and Their Impact in Technical Management in a Global Economy.*

Engineering – engineering design issues. Examples:

- *Effects of Air Resonance and Ground Resonance on Helicopters – A Simulation Model*
- *Portable Solar Cooker for Displaced Persons in Kenya*
- *Intelligent wheelchair: a Mechatronics design*

Supervision of Student Research:

Presentations:

- Mativo, J. M. & Stienecker, A. (2007).). *Innovative Exposure to Engineering Basics through Mechatronics Summer Honors Program for High School Students*. ASEE 2007, Honolulu, HI. June 24 - 27, 2007.
- Mativo, J. M., & Mativo, V. V. (2007). *Perceptions of Engineering Education*. (ITEA., San Antonio, TX. March 15-17, 2007)
- Mativo, J. M. & Jao, F. (2006). *Global Management Challenges and Recommendations*. (NAIT Cleveland, OH. Nov. 15-17, 2006)
- Mativo, J. M., Peters, R., & Wilson, S. (2006). *Cultural and Ethical Perceptions of Automotive Service Managers*. (NAIT., Cleveland, OH. Nov. 15-17, 2006)
- Mativo, J. M. Nutter, P., and Zembower, M. (2006). "A Hands-on Introduction to Robotics." MI Ready, Ohio Northern University. (Ada, OH. July 18, 2006).
- Mativo, J. M & Stienecker, A. (2006). *Mechatronics*. Summer Honors Institute, Ohio Department of Education and Ohio Northern University. (Ada, OH June 18 -23).
- Bland, A., Mativo, J. M., Miller, A., & Rouch, D. (2006). *Recommendation for General Engineering Preparation in High School: An Ohio Engineer Educators and Students Perspective*. (ITEA, Baltimore, MD. March 22-25, 2006)
- Mativo, J. M. and Peters, R. (2005). *Perception of Automotive Service Managers of New Car Dealerships*. (NAIT St. Louis, MO. Nov. 16 – 19).
- Mativo, J. M., Sirinterlikci, A., and Greavu, J. (2005). *Animatronics*. Summer Honors Institute, Ohio Department of Education & Ohio Northern University, Ada, OH Summer.
- Mativo, J. M. & Sirinterlikci, A. (2005). *Integrated Study of Engineering Sciences, Technologies, and Art*. Technology Festival Poster Session: 67th ITEA Annual Conference. Kansas City, MO. April 3-6.
- Mativo, J. M. & Rouch, D. (2005). *Perceptions of Superintendents in Ohio on the Role of Technology Education*. CTTE Poster Session: 67th ITEA Annual Conference. Kansas City, MO. April 3 - 6.
- Mativo, J. M. & Rouch, D. (2005). *Perceptions of Superintendents in Ohio regarding Funding Issues and Technology Education*. OTEA Annual Convention. Dayton, OH March 17-18.
- Mativo, J. M. & Rouch, D. (2004). *Technology Education in Ohio: What Principals and Others Think*. OTEA Annual Convention. Dayton, OH. April 2.
- Mativo, J. M & Rouch, D. (2004). *Societal Differences and Their Impact in Technical Management in a Global Economy*. NAIT Annual Conference. Louisville, KY October 20 – 21.
- Mativo, J. M. & Rouch, D. (2004). *Status of Technology Education in Ohio (1993-2003)*. ITEA Convention. Albuquerque, NM. March 17-20.
- Mativo, J. M., Rouch, D., Sirinterlikci, A., and Zembower, M. (2004). "A Hands-on Introduction to Robotics." Developed and participated in Students Paving Avenues for Research Knowledge (SPARK, 2004). Kenton, OH. April 6, 2004.
- Mativo, J. (2003). "Wood Education Revisited" OTEA Convention in Toledo, OH. March 21, 2003
- Mativo, J. M. (2001). *Department of Technology Curriculum Contribution to Preparedness for the Work Place: Case study of Department graduates 1998 – 2000*. University of Eastern Africa, Baraton.
- Mativo, J. M. (2000). *Design, Development, and Testing of a Portable Solar Cooker for Displaced Persons in Kenya (1996 – 1999)*. University of Eastern Africa, Baraton.

Mativo, J. (1999). “*Technology in 21st Century*”. Association Internationale des Etudiants en Sciences Economiques et Commerciales (AIESEC, 1999). Moi University, Eldoret- Kenya.

Flowers, G. T., & Mativo, J. M. (1995). *Design, Construction, and Testing of a Rotor Rig in Hoover*. Senior Project. Auburn University, AL.

Flowers, G. T., & Mativo, J. M. (1995). *Effects of Air Resonance and Ground Resonance on Helicopters: Computer Model Simulation*. (1993 – 1994). Auburn University, AL.

Mativo, J. M. (1993). *Leadership Skills Attributes Through Participation in Postsecondary Vocational Industrial Clubs of America: Georgia 1988-93*. Dissertation – Director Dr. John L. Scott.

Mativo, J. M. (1988). *Study and Application of Effective Preventative Maintenance of Vehicles and Machinery in Developing Countries 1986 – 1988*. Director Dr. James F. Watkins. University of Eastern Africa, Baraton.

Mativo, J. M. (1987). *Survey, Development, and Implementation of Blacksmithing for Better Quality Tools 1986 – 1987*. Director: Dr. Jon Green. University of Eastern Africa, Baraton.

4. PUBLIC SERVICE

- Georgia Department of Education – workshops on Engineering and Technology Education, Fall 2007
- College of Education, UGA – Diversity day presentation, Fall, 2007
- Hillsman Elementary School - Adopt a School Year long program (Once a month presentation)

5. OTHER SERVICE

- American Society for Engineering Education coordinator for ETD IT 2007/08
- American Society for Engineering Education (ASEE, 2004 –present); *Moderator in Engineering Technology Division (ETD) -2006/07*
 - i. *Reviewed 9 papers for ETD*
 - ii. *Reviewed 1 paper for Materials Division*
- Reviewer Journal of Engineering Technology (2005 – Present)
- International Technology Education Association (ITEA – 2003 - present). *CTTE Research and Scholarship Committee (2005 – present)*
- Reviewer for Project Lead the Way (2007) new Textbook – Engineering content