# Kurt Y. Michael, PhD

Associate Professor Assistant Dean of Doctoral Programs and Research School of Education

(434) 592-3760



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### EDUCATIONAL BACKGROUND

**Ph.D.** Virginia Polytechnic Institute and State University, Blacksburg, Virginia, May, 2000 Major: Curriculum and Instruction

**M. A.** East Carolina University, Greenville, North Carolina, May, 1988 Major: Technology Education

**B. S.** East Carolina University, Greenville, North Carolina, May, 1986 Major: Industrial Technology

Officer Basic Course. U.S. Army Corp of Engineers. Fort Belvoir, Virginia, August, 1986

### **TEACHING/ADMINISTRATIVE EXPERIENCE**

Liberty University (Associate Professor, Aug 2012- Present)

Currently *Assistant Dean of Doctoral Programs and Research* responsible for overseeing the EdS and EdD programs as well as various aspects of the dissertation doctoral program. Also, teaching both on-line and residential graduate educational research courses in the School of Education.

<u>Shenandoah Valley Governor's School (Teacher, Aug 2001- Jun 2012)</u> Taught gifted and talented high school students applied statistics and research methods in a STEM education program. Also, taught a dual enrollment course in Geospatial Information Systems in conjunction with James Madison University.

<u>Clemson University (Visiting Assistant Professor, Aug 2000- May 2001)</u> Taught teacher preparation courses in the School of Technology and Human Resource Development that prepared students for professional teaching positions in Technology Education.

<u>Virginia Polytechnic Institute and State University (Graduate Assistant, Aug 1998- May 2000)</u> Taught teacher preparation courses in the School of Integrative STEM Education that prepared students for professional teaching positions in Technology Education. Also, was responsible for Student Teaching Supervision of undergraduate students seeking Licensure. Fairfax County Public Schools (Teacher, Aug 1992- Jun1998)

Taught middle and high school technology courses in Computer Aided Drafting; Principles of Engineering; Design and Innovation; Synergistic technology module labs.

Northern Virginia Community College Continuing Education (Instructor, Aug 1992- Jul 1996) Taught continuing education courses to engineers and architects related to Computer Aided Drafting.

East Carolina University (Graduate Assistant, Aug 1987- May1988) Prepared undergraduate students for professional careers in the industrial technology.

## **PROFESSIONAL LICENSURE**

**License Type:** Virginia Department of Education Postgraduate Professional License. Endorsements in Technology Education and Gifted Education.

## **PROFESSIONAL RECOGNITION**

The 2007 Shenandoah Valley Governor's School Teacher of the Year. Presented by the Augusta County School Board.

The 1999 ITEA Maley Spirit of Excellence Outstanding Graduate Student Award. Presented by the Foundation for Technology Education.

The 1996, Region IV, Rufus W. Beamer Award for Incorporating Computer-Aided Drafting in the Classroom. Presented by the Virginia Department of Education, Virginia Council on Vocational Education, and Virginia Tech University.

## SCHOLARLY ACTIVITY: PUBLICATIONS

- Michael, K.Y. & MacFee, K.A. (2015). Calculating area under the curve for a normal distribution using the grid area technique. *Mathematics Teacher*. [In-Press].
- Michael, K.Y. & Alsup, P.R. (2015). Gender differences among Protestant Christian middle schools students and their attitudes toward science, technology, engineering and math (STEM). Journal of Research on Christian Education. [In-Press].
- Michael, K.Y. & Huddleston, C.A. (2015). Development of an instrument to measure students' attitude toward science fairs. [Unpublished paper].
- Michael, K.Y. & Jones, A.J. (2015). Vinyl Records: Going Retro in the Elementary School Classroom. Children Technology and Engineering: A Journal for Elementary School Technology and Engineering Education. 20(2), 30-33.
- Michael, K.Y. & Jones, A.J. (2015). Humorous faces in technology. Children Technology and Engineering: A Journal for Elementary School Technology and Engineering Education. 19(4), 12-15.

- Michael, K.Y. (2015). The mysteries of Mars: Exploring the surface. Children Technology and Engineering: A Journal for Elementary School Technology and Engineering Education, 19(3), 14-17.
- Michael, K. Y. (2015, Spring). Women of faith in science: The double glass ceiling. *The Journal* of Mathematics and Science: Collaborative Explorations, 15, 95-100.
- Michael, K.Y. (2014). Creative techniques for young inventors. *Children Technology and Engineering: A Journal for Elementary School Technology and Engineering Education*, 19(1), 22-25.
- Michael, K.Y. (2013, September). Bathymetry in the classroom. *Technology and Engineering Teacher*, 73(14), 14-17.
- Michael, K.Y. (2009). The effect of a computer simulation activity versus a hands-on activity on product creativity in technology education. In J.R. Fraenkel & N.E. Wallen, *How to design and evaluate research in education* (7th ed., pp. 282-292). New York, NY: McGraw-Hill.
- Michael, K.Y. (2007). The effect of a computer simulation activity versus a hands-on activity on product creativity in technology education. In L.S. Lyne, A cross section of educational research (5th ed., pp. 71-78). Los Angeles, CA: Pyrczak Publishing.
- Michael, K.Y. & Tufts, L. (2003, May). Blast off to Mars using a computer simulator. Technology and Children: A Journal for Elementary School Technology and Engineering Education, 7(4), 10.
- Michael, K.Y. & Easley, B. (2002, Sept). Magnetic levitation racers. *Technology and Children: A Journal for Elementary School Technology and Engineering Education*, 7(1), 18-19.
- Michael, K.Y. & Linnel, C. (2002). The effectiveness of an interactive problem-solving computer simulation game on enhancing the creativity of Clemson University education majors. *The Clemson Kappan*, 7(1), 24-31.
- Michael, K.Y. & Roberts, A. (2002). Big machines at work. *Technology and Children: A Journal* for Elementary School Technology and Engineering Education, 6(4), 30-32.
- Michael, K.Y. (2001, Nov). Technology educations students make a difference through service learning. *Technology and Engineering Teacher*, *61*(3), 30-32.
- Michael, K.Y. (2001). The effect of a computer simulation activity versus a hands-on activity on product creativity in technology education. *Journal of Technology Education*, 13(1), 31-43.
- Michael, K.Y. (2000). Are computer simulations as effective as hands-on experiences in the classroom? *The Clemson Kappan*.

Michael, K.Y. (2000). The effectiveness of computer simulation technology on enhancing

*the creativity of products produced by seventh grade technology education students* (Unpublished Doctoral Dissertation, Virginia Polytechnic Institute and State University).

- Michael, K.Y. (1998). Computer simulation games teach technology concepts. VTEA *Technologize*, 1, 10.
- Carnes, M. & Michael, K.Y. (1996). How-to plan for teaching writing in tech ed. *Tech Directions*, 56(5), 20.
- Michael, K.Y. (1995). Ergonomics for the CAD lab. Tech Directions, 55(4), 6-18.

#### SCHOLARLY ACTIVITY: PRESENTATIONS

- Ford, A. & Michael, K.Y. (2015, November). Data mining: Conducting research for science education. Presentation at the 2015 Annual Virginia Association of Science Teachers PDI, Westfield Dulles Marriott, Chantilly, VA.
- Michael, K.Y. & Beard, M. (2015, September). Pre-Service female elementary educators' attitude toward science and their religious beliefs: A correlational study. Presentation at the 2015 Annual Meeting of the Virginia Educational Research Association, Charlottesville, VA.
- Michael, K.Y. & Huddleston, C.A. (2015, May). *Development of an instrument to measure students' attitude toward science fairs.* Presentation at the 93rd Annual Conference of the Virginia Academy of Science, James Madison University, Harrisonburg, VA.
- Michael, K.Y. (2014, March). *Bathymetry in the classroom: Ocean floor mapping.* Showcase presentation at the 76th Annual Conference of the International Technology Education and Engineering Association, Orlando, FL.
- Michael, K.Y. (2013, May). Social justice and science: A historical, philosophical, and American perspective. Paper presented at the 2013 Science Education Faculty Academy (SEFA), George Mason University, Fairfax, VA.
- Michael, K.Y. (2007, Apr). Spotlight on student research projects at the area Governor's Schools. Presentation at the Shenandoah Valley Chapter of Phi Delta Kappa. Bridgewater, VA.
- Michael, K.Y. (2003, March). *Magnetic levitation vehicles for elementary school students*. Presentation at the 65th Annual Conference of the International Technology Education Association, Nashville, TN.
- Michael, K.Y. & Foster, P. (2002, April). *Historical leaders and the ITEA standards*. Presentation at the 64th Annual Conference of the International Technology Education Association, Columbus, OH.

- Michael, K.Y. (2001, February). *The tiny tiger toy project*. Presentation at the National Dropout Prevention Center's Service Learning Luncheon, Clemson, SC.
- Michael, K.Y. (2001, January). Are computer simulations as effective as hands-on experiences? Presentation and round table discussion at January meeting of the Clemson University Phi Delta Kappa, Clemson, SC.
- Michael, K.Y. (2000, April). *Enhancing creativity with computer simulation software*. Presentation at the 62nd Annual Conference of the International Technology Education Association, Salt Lake City, UT.

### SERVICE: PROFESSIONAL

#### Presentations

Michael, K.Y. (2004, August). *Developing creativity in the elementary classroom*. Presentation at Augusta, Highland, Staunton, and Waynesboro Public Schools Regional Share Day. Fishersville, VA.

#### **Research and grant projects**

- Michael, K.Y. (2013, Fall). Attended the Virginia Science Education Leadership Association (VSELA) conference, Norfolk, VA. Received free conference fee, travel, and two days room and board.
- Michael, K.Y. (2013, Spring). Graduate of the Virginia Science Education Faculty Academy (SEFA) at George Mason University, Fairfax, VA. This was part of a Virginia Initiative for Science Teaching and Achievement (VISTA) professional development program. Received a \$2000 stipend plus free tuition, travel, and five days room and board (May 20-24).
- Michael, K.Y. (2001, Fall). Developed a partnership with Blue Ridge Community College that allows Central Shenandoah Valley Regional Governor's School students access and instruction to The Virtual Library of Virginia (VIVA), a consortium of academic libraries offering electronic journals used for research.
- Michael, K.Y. & Linnel, C. (2000, Fall). As primary investigator, developed a proposal and received a \$2600 Clemson University Innovation Grant to conduct an experiment with early childhood and elementary education majors in developing creative thinking with computer simulation.
- Michael, K.Y. (2000, Fall). Obtained a \$300 mini grant from the National Dropout Prevention Center to make toys for disadvantaged children at the Clemson Child Development Center and The Little John Community Center as part of a service learning project.

### **Dissertation Committee Chair**

Huddleston, C. (2012-2014). Development of an instrument to measure student attitudes towards science fairs.

Camille-Anderson, F. (2012- present). *Math achievement through multiple intelligences intervention in a gender based environment.* 

Moore, E. (2012- present). *Differences in measured work ethic between high school athletes and high school non-athletes.* 

Alsup, P. (2013-2015). The effect of video interviews with Science, Technology, Engineering, and Mathematics professionals on science, technology, engineering, and mathematics attitudes and career interest of middle school students.

Jones, A. (2014-2015). The relationship between elementary teachers' years of teaching experience and their perceived instructional competence in Alabama elementary schools.

Craft, R.M. (2014- present). *Learning strategies of secondary school technology education teachers and their student.* 

### **Dissertation Reader**

Wendt, J. (2012-2013). *The effect of online collaborative learning on middle school science literacy and sense of community.* 

### **Senior Honors Thesis Committee Chair**

Beard, M. (2014- present). *The relationship between religiosity and pre-service female elementary school teachers' attitudes toward science.* 

### **Distance Course Development**

EDUC 812: Quantitative Statistics (2015, Spring) EDUC 989: Dissertation and Proposal Research (2015, Spring) EDUC 815: Quantitative Methods of Research (2013, Summer) EDUC 915: Quantitative Analysis (2012, Fall) EDUC 980: Dissertation Prospectus (2015, Spring)

### Committees

Chairman of the LU School of Education's Fulbright Committee. (Fall, 2015 – Present).

School of Education Faculty Representative on Liberty University's Graduate Senate. (Fall, 2015 – Present).

Reviewer for *Children's Technology and Engineering*. International Technology Education and Engineering Association. (Fall, 2013- Present).

Vice-Chair for the education section of the Virginia Academy of Science. Assist the education section chair in organizing, recruiting members, and preparation for the annual meeting. (Spring, 2015- Present).

Member of the Liberty University Institutional Review Board (IRB). (Spring, 2015- Present).

Chairman of the LU School of Education's STEM initiative. The STEM initiative helps promote Science, Technology, Engineering, and Math among pre-service teachers within the School of Education. (Fall, 2013- Present).

Reviewer for *The Journal of Mathematics and Science*. Virginia Commonwealth University. (2013-2014).

# **SERVICE: COMMUNITY**

Augusta County Library Board Trustee. Appointed to the Library Board by the Augusta County Board of Supervisors, Augusta County Virginia. The Library Board is responsible for the oversight of the county's library system, establishing library policy, and its budget. (2014- 2015).

Chairman of the Grace Christian High School Parent Advisory Board. The advisory board is responsible for advising the school's administration on school policy and issues. (2012-2015).

Vice President of the Emerald Hill Homeowners Association. (2014-2015).

President of the Emerald Hill Homeowners Association. (2004-2014).

Director of Blue Ridge Church's Children's Church. (2010-2012).

Sponsor the Shenandoah Valley Governor's School Fellowship of Christian Athletes. (2010-2012).

Board Member of the Virginia Weekday Religious Education Association. (2008-2012).

Shenandoah Valley Governor's School Outreach program. Help promote science and technology to elementary and middle school students by delivering hands-on science and technology activities. (2001- 2012).

## PROFESSIONAL DEVELOPMENT

### Liberty University workshops for faculty

LUO: Special Topics (2015, November) LUO: Collaborative Communication Technologies (2015, November) LUO: Reading Strategies and Resources to Assist Online Learners (2015, November) LUO: Microsoft Office 365 Ecosystem (2015, November) LUO: Teaching in a Post-Modern World (2015, November) LUO: A.W.E. Academic Writing Enhancement (2015, November) SME Course (2015, Jan 30) Finance 100 (2015, Nov 5) Bb: Export/Import/Course Restore (2014, Aug 12) Faith Learning Integration Elective (2014, Aug 12) Teaching Act: Critical Thinking (2014, Jul 15) Getting Ready to Teach a Class (2014, Jan 3) Bb at Liberty University (2014, Jan 3) Start Smart (2014, Jan 3) Stopping Plagiarism Before it Starts (2014, Jan 3) Evaluating Classroom Assignments (2013, Dec 20) Teaching Act: Assessment of Learning (2013, Dec 20) Teaching Act: Facilitating Learning (2013, Dec 20) Constructing Meaningful Writing Assignments (2013, Nov 2) Bb: Grade Center Management (2013, Nov 2) IT's Best Kept Secrets (2013, Nov 2) Minimal Technical Competencies for Liberty University Faculty (2013, Oct 18) Defensive Driving - Small Vehicles v2, PS4 eLesson (2013, Apr 15) 15 Passenger Van Safety, PS4 eLesson (2013, Apr 15) Stopping Plagiarism Before It Starts (2013, Feb 16) CITI Collaborative Institutional Training Initiative (2013, Jan 21) Getting Ready to Teach a Class (2012, Aug 17) Blackboard at Liberty University (2012, Aug 17) Faith Learning Integration Elective (2012, Aug 17) Start Smart (2012, Aug 17)

### **PROFESSIONAL MEMBERSHIPS**

American Educational Research Association (AERA) International Technology and Engineering Educators Association (ITEEA) National Science Teachers Association (NSTA) Virginia Academy of Science (VAS) Virginia Association of Science Teachers (VAST) Virginia Educational Research Association (VERA) Virginia Society for Technology in Education (VSTE) School Science and Mathematics Association (SSMA)