George McLeland Nickles III   Curriculum Vitae

Director of Assessment and Instructional Technology

Western Carolina University
Killian 201 J
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Preferred name: "Lee"

EDUCATION

M.S. Instructional Technology, East Carolina University, 2020
Graduate Certificate in Distance Learning and Administration, 2018

Ph.D. Industrial and Systems Engineering, Georgia Institute of Technology, 2004
- Emphasis in Human-Integrated Systems
- Graduate Certificate in Cognitive Science, awarded 2001
- Dissertation Title: "Work Action Analysis to Structure Planning and Formative Evaluation of an Engineering Course Using a Course Management System"
- Advisor: Dr. Amy Pritchett

M.S. Industrial Engineering, Clemson University, 1999
- Emphasis in Human Factors
- Thesis Title: "Training Human Systematic Search Behavior Using a Job Aid"
- Advisor: Dr. Anand Gramopadhye

B.S. Industrial Engineering, Clemson University, 1997
Minor in Computer Science

EMPLOYMENT

2016 – Present: Director of Assessment and Instructional Technology
College of Education and Allied Professions, Western Carolina University
Duties include:
- Generate data and narrative based reports for compliance with federal, state, and university requirements
- Generate ad-hoc data reports as needed
- Manage assessment data for programs in the college
- Manage continuous improvement reporting for university assessment processes
- Serve on the CAEP accreditation reporting team
- Serve as primary contact for data and reporting for teacher education programs with NC Department of Public Instruction and UNC System Office
- Provide consultation and support for technology managed within the college, including the Tk20 portfolio and student data system

- Manage technology support position
- Serve as college liaison to the Division of IT
- Chair the college's assessment committee
- Support the assessment and accreditation efforts overseen by the associate dean
- Manage equipment and technology budget
- Other duties as assigned within Suite 201

2021 – Present: Adjunct Faculty
College of Education, Anderson University
Teach courses in the MS in Instructional Design and Learning Technology program

2006 – 2016: Assistant to the Dean for Technology and Curriculum
College of Education and Allied Professions, Western Carolina University
Duties included:
- Provide consultation and support for instructional and research technology
- Manage instructional technology projects initiated in the college and facilitate consultation with campus IT Services
- Provide instructional technology training for the college
- Teach courses related to teaching with technology and digital literacy
- Support the curriculum change process within the college
- Manage the college's technology resources, including equipment checkout, procurement, and support of research technology
- Serve as the fixed assets coordinator for the college, including setting policy, overseeing inventory, and maintaining compliance records
- Provide implementation, training, and technical support for TaskStream portfolio and assessment system in the college – includes supporting faculty, staff, host/cooperating teachers, and students and creating and maintaining portfolio templates
- Develop solutions for student data management within the college
- Chair the college's Technology Committee
- Provide website maintenance and support for the college and its units
- Manage the college's news and social media presence (Facebook, Youtube, Instagram, Twitter, Wordpress), including management of digital signage
- Manage equipment and technology budget
- Supervise administrative assistant and student workers

2004 – 2006: Postdoctorate Research Associate
Information Technology and Science Center for Teaching and Learning, Texas A&M University
The ITS Center was an NSF funded center to promote the use of inquiry-based learning and information technology for teaching science in grades 7-12 and undergraduate education. Duties included:
- Internal evaluation coordinator for the center
- Web-based portal administrator
- Research focusing on the center's model of professional development

1999 – 2004: Graduate Assistantships
Georgia Institute of Technology
Industrial and Systems Engineering
Research and development on supporting a new integrated curriculum via a custom-built course management system.

Industrial and Systems Engineering
Instructor for senior level Design of Human Integrated Systems (ISyE 4009)

Center for the Enhancement of Teaching and Learning
Research on current practices of end of term course surveys in higher education

1997 – 1999: Graduate Assistantships
Industrial Engineering, Clemson University
Project manager and developer for the computer-based simulator component of a commercial aircraft inspector training program

Teaching assistant for senior level Production Planning and Control (IE 486)

1997: Undergraduate Research
Industrial Engineering, Clemson University
Developer for computer-based commercial driver's license training program

Summer, 1995 & Spring, 1996: Co-op Internship
AMP Circuits, Carolina Division
Performed capacity, manpower, and facility layout studies, developed a flowchart of the plant process

1995 – 2000: Self-employed computer consultant and technician
Advised on purchase of equipment; performed setup, troubleshooting, and basic computer use training

TEACHING EXPERIENCE

Anderson University
Foundations of Instructional Design (graduate level, online)

Western Carolina University
- Computers in Education (undergraduate, face-to-face)
- Digital Literacy Methods - K-6 (undergraduate and graduate, face-to-face and hybrid)
- Leadership in e-Teaching and e-Learning (doctoral level, online)
- Data Representation (doctoral level, hybrid)
- Engineering Projects for Elementary and Middle Grades Educators (graduate level, online and hybrid)

- Integrating STEM Into the Curriculum (graduate level, hybrid)

Georgia Tech
Design of Human-Integrated Systems (undergraduate, face-to-face)

RESEARCH PRODUCTS

Journal Articles

Nickles, G. (2020). Design factors for distance clinical experiences: A literature review. *Distance Learning.* 17(1), 19-25.

Nickles, G. (2017). Initializing an online program: Ten themes from the literature. *International Journal of Instructional Technology and Distance Learning.* 14(7), 39-49.

Corbin, R., Carpenter, D., & Nickles, G. (2013). The Capacity of Teacher Education Institutions in North Carolina to Meet Program Approval and Accreditation Demands for Data. *International Journal of ePortfolio.* 3(1), 47-61.

Nickles, G. & Pritchett, A. (2012). Work Action Analysis: A Cognitive Engineering Method to Examine Educational Systems. *Journal of Cognitive Engineering and Decision Making.* 6(1), 112-136.

Nickles, G. (2007). Using work action analysis to identify web-portal requirements for a professional development program. *International Journal on E-Learning.* 6(4), 565-580. (Invited)

Nickles, G. (2005). Identifying measures of student behavior from interaction with a course management system. *Journal of Educational Technology Systems*, 34(1), 111-126.

Nickles, G., Melloy, B., & Gramopadhye, A. (2003). A comparison of three levels of training designed to promote systematic search behavior in visual inspection, *International Journal of Industrial Ergonomics,* 32(5), 331-339.

Book Chapters

Nickles, G. & Herbert, B. (2012). Connectivity in the IT-based Learning Ecology: A System Perspective, *The New Science Education Leadership: An IT-based Learning Ecology Model* (pp. 83-93): Teacher's College Press.

Nickles, G., Marshall, J., Gramopadhye, A., & Melloy, B. (2001). ASSIST: Training program for inspectors in the aircraft maintenance industry, *International Encyclopedia for Ergonomics and Human Factors* (Vol. 2, pp. 1178-1180): Taylor and Francis.

Nickles, G., & Gramopadhye, A. (2001). Using task analysis to design a computer-based inspection training program, *International Encyclopedia for Ergonomics and Human Factors* (Vol. 2, pp. 1378-1383): Taylor and Francis.

Nickles, G., Gramopadhye, A., & Melloy, B. (1998). Enhancing aviation safety through the development of aircraft inspection training modes and interventions, *Industrial and Occupational Ergonomics: Users' Encyclopedia*: International Journal of Industrial Engineering - Theory, Applications & Practice. Available on CD-ROM.

Conference Papers

Nickles, G. (2005). *Using work action analysis to design information technology support for an academic community.* Paper presented at E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education, Vancouver, BC, Canada.

Nickles, G. (2005). *Correlations of student grades and behavior while using a course management system under different contexts.* Paper presented at the American Society for Engineering Education Annual Meeting, Portland, OR.

Nickles, G., Stuessy, C., & Schielack, J. (2005). *Successful K-12 teacher and faculty participation in a STEM professional development program.* Paper presented at the American Society for Engineering Education Annual Meeting, Portland, OR.

Pritchett, A., Nickles, G., Quinn, A. (2003). *Contributions of cognitive engineering methods to engineering education.* Paper presented at the American Society for Engineering Education Annual Conference, Nashville, TN.

Nickles, G., & Pritchett, A. (2002). *Software for the automated evaluation of web-delivered instruction.* Paper presented at the American Society for Engineering Education Annual Conference, Montréal, Canada.

Pritchett, A., Quinn, A., Nickles, G., Ashok, M., Iken, M., & Lu, J. C. (2002). *Internet based curriculum innovation in information engineering and e-business: The integrated curriculum delivery system.* Paper presented at the American Society for Engineering Education Annual Conference, Montréal, Canada.

Emery, V. K., Jacko, J. A., Kongnakorn, T., Kuruchittham, V., Landry, S., Nickles, G. M., Sears, A., & Whittle, J. (2001). *Identifying critical interaction scenarios for innovative user modeling.* Paper presented at the Ninth International Conference on Human-Computer Interaction, New Orleans, LA, August 5-10, 481-485.

Gramopadhye, A., Melloy, B., Him, H., Koenig, S., Nickles, G., Bingham, J., Kauffman, J. Thacker, J., & Master, R. (2000). *The use of a high-fidelity simulator to improve aircraft inspection performance: The ASSIST program.* Paper presented at the IEA 2000/Human Factors and Ergonomics Society 44th Annual Meeting, San Diego, CA.

Him, H. D., Nickles, G., Leonard, M., Kimbler, D., & Gramopadhye, A. (1999). *Asynchronous learning applied to classroom instruction: lessons learned.* Paper presented at the Industrial Engineering Research Conference '99, Phoenix, AR.

Nickles, G., Sacrez, V., & Gramopadhye, A. (1998). *Can we train humans to be systematic inspectors?* Paper presented at the Human Factors and Ergonomics Society 42nd Annual Meeting, Santa Monica, CA.

Koenig, S., Nickles, G., Kimbler, D., Melloy, B., & Gramopadhye, A. (1998). *Visual inspection simulator (VisInS): A computer-based inspection simulation tool for off-line experimentation.* Paper presented at the Industrial Engineering Research Conference, Banff, Alberta, Canada.

Harris, J., Him, H. D., Koenig, S., Nickles, G., Kaufman, J., Thacker, J., Melloy, B., & Gramopadhye, A. (1998). *A unified approach to aircraft inspector training.* Paper presented at the Industrial Engineering Research Conference, Banff, Alberta, Canada.

Nickles, G., Him, H. D., Koenig, S., Gramopadhye, A., & Melloy, B. (1998). *A descriptive model of aircraft inspection activities.* Paper presented at the Industrial Engineering Research Conference, Banff, Alberta, Canada.

Presentations and Workshops

Nickles, G. (2020). *Semester-Based Differences in edTPA Scores*. Presentation at the 38th Annual North Carolina Teacher Education Forum. Virtual (Refereed)

Nickles, G., Bricker, P. (2019). *Responding to the CAEP Annual Report: Display of Annual Reporting Measures*. Presentation at the 37th Annual North Carolina Teacher Education Forum. Raleigh, NC (Refereed)

Meltzer, S., Nickles, G., Ray, M., Watson, M., Winter, K. (2017). *edTPA Policy and Practice*. Presentation at The Inclusion Summit. Cullowhee, NC.

Dobson, E., & Nickles, G. (2016). *edTPA and Technology*. Presentation at Building Capacity for Educative Implementation of edTPA – UNC General Administration. Chapel Hill, NC. (Invited)

Nickles, G., & Colton, M. (2015). *Preparing Students for Video Assessment*. Presentation at CollabEx Live. New York, NY. (Refereed)

Nickles, G. (2014). *Teacher Candidate Database Redesign: A Case Study.* Presentation at the 32nd Annual North Carolina Teacher Education Forum. Raleigh, NC. (Refereed)

Winter, K., Watson, M., Beaudet, R., Carter, C., Meltzer, S., and Nickles, G. (2014). *edTPA Implementation: WCU's Year One Perspective.* Presentation at the 32nd Annual North Carolina Teacher Education Forum. Raleigh, NC. (Refereed)

Nickles, G. (2014). *Digital Presentation Tools*. Presentation at DigiX. Cullowhee, NC

Nickles, G. (2013). *The Whys and Hows of Programming Literacy as a Part of the Curriculum*. Presentation at Tech 210: Advanced Digital Learning – North Carolina Center for the Advancement of Teaching. Cullowhee, NC. (Invited)

Nickles, G. (2013). *End-to-End Video for Your Class*. Presentation at DigiX. Cullowhee, NC.

Corbin, R., Nickles, G., & Carpenter, D. (2012). *Do NC IHEs have the capacity to meet future demands for data?* Presentation at the 30th Annual North Carolina Teacher Education Forum. Raleigh, NC. (Refereed)

Nickles, G. (2011). *Hands-On Video Recorders*. Presentation for the AppState Summer FreeLearning Conference. Boone, NC. (Refereed)

Nickles, G. (2010). *WCU TaskStream Implementation*. Presentation for the North Carolina TaskStream User's Group. Online webinar.

Nickles, G. (2010). *EdTech Seminar*. Presentation for the WCU Teaching Fellows. Cullowhee, NC. (Invited)

Nickles, G. & Corbin, R. (2010). *Utilizing best practices: Lessons learned in developing an electronic assessment system.* Presentation at the 28th Annual North Carolina Teacher Education Forum. Raleigh, NC. (Refereed)

Houghton, R., Nickles G. & Strahan, D. (2010). *What does it mean to be digitally literate in the 21st century?* Teachers for Tomorrow Reaching To Teach Conference for Middle School Students. Cullowhee, NC.

Nickles, G. (2007 & 2008). *What is Industrial Engineering?* Presentation for the North Carolina Math and Science Education Network's Pre-College Program. Cullowhee, NC.

Nickles, G. (2006-2007). Various workshops on TaskStream for faculty, staff, students, and teachers.

Nickles, G. & Milam, J. (2006). *A Correlation Analysis of Social Network Measures with Social Perceptions and Planned Implementation Quality in a Professional Development Setting*, Presentation at the American Educational Research Association Annual Meeting. San Francisco, CA. (Refereed)

Nickles, G. (2006). Defining and Measuring Centeredness: Preliminary Work, *Centers for Learning and Teaching Principal Investigator Meeting*. Washington, DC: the National Science Foundation.

Schielack, J., & Nickles, G. (2005). *An Overview of the Information Technology in Science Center for Teaching and Learning with Project Evaluation in Mind*, Presentation at the Science Society and Technology Fall Seminar Series. College Station, TX: Texas A&M University. (Invited)

Nickles, G. (2005). *Introduction to accessibility for the Web*. Presentation to the ITS Center graduate students, April 5. College Station, TX: Texas A&M University.

Nickles, G. (2004). *Identifying measures of student behavior from interaction with a course management system*. Presentation for the Information Technology Working Group, September 14. College Station, TX: Texas A&M University. (Invited)

Quinn, A. & Nickles, G. (2002). *The integrated curriculum delivery system*. Presented at the Cognitive Science Student Conference. Atlanta, GA: Georgia Tech

Nickles, G., Pritchett, A., & Trotti, L. (2001). *Methods of measuring teaching effectiveness in the classroom and on the internet: a survey of engineering instructors*. Presented at the American Society for Engineering Education Annual Conference, Albuquerque, NM. (Refereed)

Nickles, G. (2001). *Supporting evaluation of educational web sites through perceptual displays*. Poster presented at the Cognitive Science Student Conference. Atlanta, GA: Georgia Tech/Emory University.

Gramopadhye, A., Copelan, S., Robinson, K., & Nickles, G. (1999). *Training for inspection: ASSIST, Workshop 3*. 13th Symposium on Human Factors in Aircraft Maintenance and Inspection. Daytona Beach, FL

Technical Reports

Gramopadhye, A., Melloy, B., Nickles, G., & Watson, J. (1999). *Use of computer based training for aircraft inspection: minimizing errors and standardizing the inspection process*. Human Factors in Aviation Maintenance and Inspection Research Phase Report. Washington, D. C.: Federal Aviation Administration.

Columns

Nickles, G. (2008). Member Forum: Engineering K-12 education. *Industrial Engineer*. 40(1), 24.

Selected Projects

Student Data System Transition – Transition the college from TaskStream to Tk20 for electronic portfolio and administrative tasks including admissions, field experience, licensure, and assessment. Initiated project, chaired platform selection committee, and led transition team. Summer 2015 to Fall 2016.

Killian 102 – A redesigned learning space project. A large meeting room with minimal technology was converted into a space with multiple collaboration stations with interactive whiteboards, digital A/V control, moveable furniture, increased seats, and wireless microphones. Conversion happened in Summer through Fall 2011 and the room is in high demand for classes and events.

ITWeb – A course management and delivery system designed to support an integrated curriculum. Developed using PHP, MySQL, and Perl. I served as one of the two primary graduate student developers and administrators (of four total). ITWeb was in active use from Fall 2001 – Fall 2007. The project was funded by the NSF.

ASSIST – A commercial aircraft inspector training program. Developed in Visual Basic 4.0 and SQL. Served as lead developer for the Aircraft Inspection Training Simulation (AITS) component of a team of three on this component. This project was funded by Delta Airlines and Galaxy Scientific. Development took place over 1997-1999.

College Website – oversaw two revisions of the website for the College of Education and Allied professions in 2010 and 2013.

Asset Tracking Database – A database to track college assets and manage equipment checkout. Developed in Access. Created in 2007 with major redesign in 2011.

GRANTS

Disc Golf Scout Day. 2017. Proposal for an Innovation Grant from the Professional Disc Golf Association. Initiates a Disc Golf event with local Cub Scout Pack. Applied in collaboration with Justin Menickelli, associate professor of health and physical education. Grant total: $500. Project Leader/Primary Applicant. Awarded.

WheePlay Gamification. 2014. Proposal for "External Funding Support Grant" from Western Carolina University. Initiates project to implement a badge gamification system in teacher education programs at WCU. Proposed total: $9600. Principal Investigator. Not funded.

Project 1:1. 2014. Proposal for "External Funding Support Grant" from Western Carolina University. Initiates project to support regional professional development for P-12 schools on 1:1 digital device implementation. Grant total: $9100. Co-Principal Investigator. Awarded.

Get Smart(er). 2013. Proposal for Library Services and Technology Act funds via the State Library of North Carolina. Collaboration between Hunter Library, the Coulter Faculty Commons, and the College of Education and Allied Professions. Grant total: $18,193. Co-Principal Investigator. Awarded.

Western iPad Sensor Project (WiSP). 2010. Proposal to the Institute for Education Sciences, U.S. Department of Education. Collaboration of STEM and Teacher Education. Proposed total: $300,000. Co-Principal Investigator. Not funded

SERVICE ACTIVITIES

Service on the following committees – college level:
- Assessment Committee – 2011-present
- Accreditation Steering Committee – 2017-present
- Committee (ad hoc) on the Teacher Candidate Interview – 2008
- Curriculum Committee – 2007-2016
- Directors Council– 2006-2010 (convener for 2008-2009)
- Disaster Management Committee (chair) – 2011-2016
- edTPA Implementation Commission – 2013-present
- Educational Research Faculty search committee – 2017
- Gamification Exploration Committee (chair) – 2014
- Leadership Council – 2006-present
- NCATE Accreditation Standard 2 Committee – 2012-2015
- NC Digital Learning Competencies Task Force – 2019-present
- Professional Examination Preparation Task Force – 2015-2016
- Social Media Strategy Committee (chair) – 2015
- Strategic Plan Implementation Team – 2019-2020
- Technology and Education Committee (chair) – 2007-2017
- Teacher Education Systems Review (chair) – 2015-2016

Service on the following committees – university level:
- Center for Math and Science Education Advisory Board – 2007-2009
- Digital Signage Advisory Group (chair from inception to 2019) – 2018-present
- Division of IT DigiX Event Committee – 2014
- J. M. Robinson Award Committee – 2008, 2009
- J. M. Robinson Distinguished Professor Search Committee (chair) – 2011-2012
- LMS Administrator Search Committee (WCU IT search) – 2019
- Professional Education Council subcommittee on Technology Integration into Teacher Education Programs – 2011-2012
- WCU Academic IT Liaisons Committee – 2011-present
- WCU Academic Technology Advisory Council – 2012-2014
- WCU Academic Technology Committee – 2007-2009
- WCU Campus Master Planning Task Force on Improving Technology Infrastructure – 2012-2013
- WCU Institutional Effectiveness Council – 2017-present
- WCU Intranet Steering Committee (co-chair for 2012) – 2011-2012
- WCU Intranet Task Force – 2006-2007
- WCU iPad User's Group (founder & convener) – 2011-2012
- WCU IT Client Technologies Governance committee – 2020-present
- WCU IT committee on Clinical Video – 2013-2016
- WCU LMS Governance Committee – 2019-present
- WCU Professional Education Council – 2007-present

- WCU Web Content Management System Task Force – 2012
- WCU Website Vendor Selection Committee - 2014

Thesis/Disquisition Committees
- Committee member for Teresa Worthy, EdD – 2012-2015
- Committee member for Amanda Mitchell Bolding, MA Psychology – 2015-2017
- Disquisition chair for Amelia Schlott, EdD – 2019-2021

State-level service:
- Facilitator for the UNC-General Administration/Education Deans workgroup on Assessment Technical Issues: Spring 2011.
- Chair of the NC Department of Public Instruction workgroup on Technology for Implementing Teacher Education Revisioning: 2011-2012.
- Participation and occasional presenter in the North Carolina TaskStream User's Group; 2006-2014
- Co-Facilitator for edTPA Forum at the NC-ACTE Spring Forum, 2018
- UNC System Data and Strategic Research Advisory Committee: 2017-2019

Reviewer:
- Journal of Teacher Education – 2014-2020
- American Society for Engineering Education – Southeastern Section Meeting, 2009
- American Society for Engineering Education Annual Meeting, 2002, 2003, 2005, 2006
- Human Factors and Ergonomics Society Annual Meeting, 2006

Other:
- Co-Student Coordinator for the "Community of Scholars," a series of meetings between the research groups of Drs. Julie Jacko, Amy Pritchett, and Francois Sainfort at Georgia Tech, 2002-2003
- Student Volunteer for the Human Factors and Ergonomics Society Annual Meeting; Served as co-chair for poster session, 2002

PROFESSIONAL DEVELOPMENT

Accessibility in the Classroom online training offered by NC State - 2021

National Science Teachers Association Miniseries: What Is Social Justice Teaching - 2021

Completed MOOC on Applying and Leading Assessment offered by Colorado State University - 2017

NC Homebase Professional Learning for Institutions of Higher Education workshop - 2017

Completed MOOC on Gamification offered by U. of Pennsylvania via Coursera – 2015

 "Independently Applying the Quality Matters Rubric" workshop at WCU – 2015

CITI Program, IRB Required – 2019 (most recent)

Equal Employment Opportunity Institute – Level 1 (NC Office of State Personnel) – 2013

COMMUNITY SERVICE

Paw Paw Cove HOA, Sylva, NC – Secretary - 2021-present

Redeemer Church, Sylva, NC – Leadership team, 2012-2016; Elder – 2016-present

WCU COVID-19 Vaccine Clinic volunteer, multiple shifts - 2021

American Heritage Girls Troop 58 of Asheville, NC – Unit Leader, 2014-2016

Cub Scout Pack 914 of Cullowhee, NC – various leadership positions, 2013-2017

AWARDS

WCU Star Staff Award, campus-wide, WCU (Nominated), 2021

Suite 201 Over and Above Award, Suite 201, WCU, 2020

Dean's Over and Above Award, College of Education and Allied Professions, WCU, 2019

Student Nominated Faculty of the Year Award, campus-wide, WCU (Nominated), 2017

Staff Exemplary Service Award, College of Education and Allied Professions, WCU, 2017

College Good News Award, College of Education and Allied Professions, WCU, 2013

Presidential Fellowship, Georgia Institute of Technology, 1999-2003

Faculty Graduate Assistant of the Year, Industrial Engineering, Clemson University, 1999