

Randy Brooks

Technology Infused Educator

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Career Profile

23-year telecom industry veteran in the 7th year of refocusing passion and experience as a Secondary Math and Engineering educator...igniting and engaging the curiosity of students through multimedia tools... accelerating abilities of instructors to better connect with their digital natives using a particular emphasis on STEM subjects, driven by significant experience in real-world application and project management...special focus on applying human performance analysis and tailored instructional design to create curriculum guiding both instructors and students to operate in the digital world, which is quickly evolving before us.

Core Competencies

- Daily engagement with digital natives for instruction and assessment of impact.
 - Interest in and drive to propel an educational 'webolution' leading to quality, rigorous online coursework, classes, and support.
 - Lesson production with an eye toward delivering and receiving products digitally.
 - Vision to rebuild curriculum & instruction in the digital realm.
 - Great interest in taking the 'Flipped Classroom' from the current fad to the future in the form of quality, online, student-centered lessons.
 - Extensive experience training telecom industry personnel.
 - Technical career focused on developing and applying mathematical concepts in business and engineering environments.
 - History of working with kids in high school environment, academic and sports teams, church and volunteer activities.
 - Use of organizational and creative writing talents to support production of effective bridges between procedural and conceptual lessons.
 - Proven ability to work with management and peers to focus teams on priorities.
 - Adept at assessing knowledge level of audience for use in creating effective instruction.
 - Engaged in STEM promotion as both a PreCalculus and PLTW Engineering instructor.
 - Pursuing quality online engineering tools as Research Experiences for Teachers (RET) participant with the Texas A&M Computer Science Sketch Recognition Lab (TAMU SRL).
 - Commitment to development of tools and training to improve the college and life readiness of our graduating high school seniors.
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Relevant Education Industry Instruction Experience

High School Mathematics and PLTW Engineering Educator

Lovejoy High School, Lovejoy ISD, Lucas, Texas 2010 - Future

- HEB Rising Star Finalist in 2014 and Rising Star Semi-Finalist in 2016.
- Completed 4-day Kagan Class Engagement Workshop in January 2017.
- 2016 – 2017 PBS LearningMedia Digital Innovator.
- On track to complete Purdue Learning Design and Technology Masters work in May 2017.
- Pursuing launch of Lovejoy Signature Courses online school in 2017 with Lovejoy ISD.
- Customizing and delivering instruction in PreCalculus and PLTW Principles of Engineering.
- Lovejoy High School Web manager.
- Presented on Flipped Classrooms at Learning@Lovejoy PD Summer 2012 and Summer 2013.
- Presented on Flipped/Blended/Online Classrooms at TCEA in 2014, 2015, and 2017.
- Texas PTA Honorary Life Membership, 2015

Texas A&M University, Computer Science & Engineering

Sketch Recognition Lab (SRL)

Research Experiences for Teachers (RET) Program

College Station, Texas 2015 - Future

- Presented on TAMU SRL tool, Mechanix, at 2016 CPTTE at Brown University, 2016 PLTW Summit in Indianapolis, and 2016 PLTW-Texas Convention in Houston.
- Expert user testing, field testing in my high school STEM lab, and development consulting regarding an online tool (TAMU SRL Mechanix) supporting vector, free-body diagram, and truss analysis by providing real-time constructive feedback for learners and performance metrics for instructors.

Mathematics/ACT Tutor

Tutoring101 2014 - Future

- Staff tutor preparing students for the Math portion of the ACT College Entrance Exam.
- Staff tutor providing 1:1 math guidance for a wide demographic of students ranging from 4th grade to PreCalculus.

InfuseUs.com 2009 - Future

- Self-initiated website devoted to support educators in the engagement of the Digital Natives as well as supports for the Digital Natives.
 - Offerings include links, samples, and direction regarding portals providing benefit for today's in-classroom instruction as well as migration to digitally-based, online instruction.
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Relevant Telecom Industry Instruction Experience

Telephone Product Launch

Charter Communications, 2005-2009

- Delivered training to various cable network personnel regarding the operation and deployment strategy of a new product (telephone) on the cable network.
- Assessed technical/product knowledge of various departments and tailored training content to be most effective.

Traffic Engineer Curriculum Development and Delivery

Vartec Communications, 2000-2005

- Developed and delivered curriculum to reinforce the procedural needs of traffic engineers and to clearly tie those activities to the conceptual requirements of the position.
- Joined Vartec with no training structure in place and developed and delivered a program to educate and promote team members.

Traffic Engineer and Planner Training, MCI Communications

1986-2000

- Built templates used for traffic engineering and trained teams and management on their use.
 - Worked closely with outside vendor to tailor a procedural program to better match the conceptual needs of the organization, and served as Subject Matter Expert (SME) during delivery.
 - Provided myriad trainings to direct reports, peers, and upper management regarding new network deployments and procedural adjustments and impacts.
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Telecommunications Professional Experience

Manager, Telephone Operations

2005-2009

Charter Communications

- Served as in-market Project Manager and Subject Matter Expert (SME) for deployment of Local Telephone Service on the Charter Communications cable plant in Fort Worth, Texas.
- Managed team addressing video theft.

Sr. Director Switched Network Engineering

2000-2005

Vartec Telecommunications

- Specifically brought to Vartec to create the Network Planning, Traffic Engineering, Network Optimization, and Project Implementation departments to manage the high growth at this mid-tier telecom provider with a 23 switch network.
- Recruited and trained members of the organization.

Manager, Switch Engineering & Planning

1992-2000

MCI Telecommunications

- Planned and managed the 85+ switched network.
- Developed, implemented, and administered training for monitoring/planning tool enhancements.

Traffic Engineer and Team Lead

1986-1992

MCI Telecommunications

- Regional Project Manager for implementing MCI's first SS7 interconnection with a LEC (BellSouth).
- Developed the template employed by traffic engineering peers at MCI for monitoring and managing capacity on the myriad Local Telephone interconnection trunks.

Education

Texas A&M University, B.S. Engineering Technology – Telecommunication Specialty 1986

Purdue University, M.S. Learning Design and Technology (LDT) – Planned completion May 2017

Development/Leadership/Awards/Community

- Presented 'Blending with PBS Learning, GC, and More' at TCEA in February 2017.
 - April 2016 presenter regarding 'TAMU SRL Mechanix' at CPTTE 2016 at Brown University.
 - March 2016 presenter regarding 'TAMU SRL Mechanix' at PLTW National & Texas Summit.
 - Texas A&M University Research Experiences for Teachers (RET) participant (2015 – Future).
 - 2016 – 2017 PBS LearningMedia Digital Innovator.
 - Lovejoy ISD STEM Council (2014 – Future).
 - 2015 Texas PTA Honorary Life Membership
 - 2015 Texas A&M Enrichment Experiences in Engineering E³ Summer Research Program
 - 2014 HEB Rising Star Finalist, 2016 HEB Rising Star Semi-Finalist
 - Proclamation 2015 - TEA Mathematics Textbook Evaluation. (Summer 2014)
 - Presented 'Flipped Classrooms: Fad, Fiction, or Future?' at TCEA in February 2014.
 - Presented 'The Next Giant Leap: Flipped to Online' at TCEA in February 2015.
 - Learning@Lovejoy summer PD high attendance in 2010/2011/2013.
 - Learning@Lovejoy presentations on 'Flipped Classrooms' in 2012/2013.
 - LISD Site-based committee (2013 – Future).
 - LHS Site-based committee (2012 – Future).
 - LISD Mission Possible (Technology Advancement) Team member since inception in 2011.
 - LHS Teacher Leader Team Member 2012/2013.
 - LISD Schools-Attuned trained PST support team member since inception in 2012.
 - Launched MathFella channel (2013) available to the planet via Youtube and Schooltube with a focus on math tutorials addressing commonly difficult concepts for high school students which are a basis for College Readiness understanding.
 - PLTW Summer Institute training – 10 days for PoE (2014) and 10 days for IED (2015).
 - AP-SMU Pre-AP Math Summer Institute training – 4 days (2011).
 - AMDM UT-Dana Center summer training – 5 days (2010).
 - Piloted precursor course for AQR (AMDM) in first year of teaching (2010).
 - GT training (2010).
 - Awarded a grant of 30 iPads for upper-level math classroom use by Lovejoy Foundation in 2013.
 - Playwright and musician in local church and charter musician in the Allen Community Band.
 - Past City Council and Planning and Zoning Commission member.
 - Lovejoy High School Band Boosters President (2013).
 - Certified Toastmaster (CTM).
 - Member NCTM (National Council of Teachers of Mathematics).
 - Member TCEA (Texas Computer Education Association).
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