

ERICK MULLAH BUGAH

STEM Educator | Instructional Designer | Learning Analytics Specialist

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EXECUTIVE SUMMARY

Results-oriented Instructional Designer and STEM Educator with over 7 years of experience in curriculum development, digital learning integration, and educational leadership. Proven track record in leveraging data analytics (Excel, PowerBI, SQL) to drive student performance and institutional efficiency. Expert in designing engaging, interactive learning experiences using Articulate Storyline, PhET simulations, and instructional technology, with a focus on making STEM concepts accessible, scalable, and measurable.

CORE COMPETENCIES

- **Instructional Design:** Articulate Storyline, Curriculum Mapping, Needs Analysis, ADDIE/SAM Models, Storyboarding.
- **Data & Analytics:** Excel, PowerBI, SQL, SPSS, Python, Data-Driven Decision Making.
- **EdTech Integration:** eLearning Content Creation, PhET Simulations, Digital Storytelling.
- **Leadership:** Stakeholder Engagement, Project Management, Teacher Training & Mentorship.

PROFESSIONAL EXPERIENCE

Memphis-Shelby County Schools | Memphis, TN

Middle School Science Teacher / STEM Advisory Team | **Feb 2025 – Present**

- **Curriculum Development:** Design and implement interactive Science curricula for Grades 6 & 7, increasing student engagement through inquiry-based projects and STEM initiatives.
- **Stakeholder Leadership:** Serve on the STEM Advisory Team, collaborating with administrators to align school-wide STEM curricula with state standards and future-ready skills.
- **Partnership Management:** Act as HOSA Ambassador, liaising with the University of Tennessee Health Science Center (UTHSC) to facilitate healthcare-related programs and career pathways for students.

Center for Mathematics, Science, and Technology Education in Africa (CEMASTEA) |
Nairobi, Kenya

Technical Trainer (Graphic Design & 3D Printing) | Dec 2024

- **Skills Modernization & Impact:** Facilitated a high-impact technical workshop on Graphic Design and 3D Printing for 15 students; achieved a 96% post-training confidence rate among learners and drove a 20% increase in course registration for the subsequent cohort.

Teachers Service Commission (TSC) | Nairobi, Kenya

Teacher / TPAD Champion / Departmental Leader | Jan 2020 – Feb 2025

- **Performance Analytics:** Spearheaded the Teacher Professional and Appraisal Development (TPAD) framework; developed an interactive PowerBI dashboard to track and analyze performance metrics for 91 students, utilizing the insights to mentor staff and target instructional interventions.
- **STEM Advocacy:** Instructed students for the Kenya Science and Engineering Fair (KSEF), resulting in successful regional-level participation and increased student interest in STEM disciplines.
- **Process Improvement:** Streamlined examination office operations, ensuring 100% accuracy in learner assessments and reporting during peak periods.

University of Colorado Boulder | Remote / Kenya

PhET Fellow | Mar 2024 – May 2024

- **Digital Transformation:** Integrated interactive STEM simulations into science curricula, training fellow educators on using digital tools to improve conceptual understanding of Physics and Chemistry.

Kitengela Muslim Girls' High School | Kajiado, Kenya

Director of Studies / Chemistry & Physics Teacher | Jan 2019 – Dec 2019

- **Academic Strategy:** Directed academic initiatives and evidence-based curriculum strategies, driving a 16% increase in Chemistry and a 13% increase in Physics mean scores, significantly boosting national examination readiness.

EDUCATION, HONORS, & CREDENTIALS

- **Masters of Education in Instructional Design and Technology (M.Ed. IDT):** American College of Education (ACE), **July 2025** -
- **Honors:** Initiated into the Alpha Theta Psi Chapter at the American College of Education as a member of KDP (Kappa Delta Pi International Honor Society in Education).

- **Bachelor of Education (Science, with IT):** Second Class Upper Division, Maseno University, **Sept 2009 – Dec 2018.**
 - *University Leadership:* Served as **Director of Entertainment (SOMU)**, directing end-to-end event logistics for the 2015/2016 Mr. and Mrs. Maseno Pageant. Secured strategic corporate partnerships (Safaricom, Coca-Cola, KCB, Equity Bank) and successfully hosted an engaged audience of 2,300+ students.

Global Teaching Licensure:

- **United States (Tennessee):** Computer Science (K-12), Physics (6-12), Chemistry (6-12), Middle Grades Sciences (6-8).
- **United States (Maryland):** Technology Education (7-12), Physics (7-12), Chemistry (7-12), Middle School Science (4-9).
- **Kenya (TSC):** Licensed Teacher of Chemistry and Physics.

Professional Certifications:

- **Instructional Design & Multimedia:** Articulate Storyline Essential Training (LinkedIn Learning) | Camtasia & Snagit Certifications (TechSmith) | AI Career Essentials (ALX) | Teacher & Graphic Design Essentials (Canva).
- **EdTech & STEM Integration:** Clever Champion (Level 4, Clever Inc.) | Minecraft Education: STEM & PBL (ORAU) | Instructional Routines for Science Instruction (ORISE) | The Digital & Social Emotional Educator (UNESCO MGIEP).
- **Project Management & Leadership:** Comprehensive Project Management Foundations (Microsoft/LinkedIn - covering Risk, Budgets, Stakeholders, Teams) | ALX Ventures Founder Academy.
- **Data Analytics & Cybersecurity:** Data Analytics Essentials (Cisco) | Intro to Cybersecurity (Cisco, Moringa School).

TECHNICAL SKILLS

Technical Stack: Articulate Storyline, HTML, CSS, SQL, SPSS, PowerBI, Tableau, Adobe Creative Cloud, Canva, WordPress, Microsoft 365.