# Curriculum Vitae JAIME ANN MCQUEEN, Ph.D.

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Professional Instructional Design, Technology, and Educational Research Portfolio: www.jaimemcqueenphd.com

Dedicated, focused, and results-driven professional instructional designer and educational researcher with 15+ years of experience in curriculum development and evaluation, educational technology leadership, and learning sciences research.

## **EDUCATION AND CERTIFICATIONS**

## Ph.D. - Curriculum and Instruction

Texas A&M University-Corpus Christi, Corpus Christi, Texas 5/2017

Instructional Design and Science, Technology, Engineering, and Mathematics (STEM) Education emphasis.

**Dissertation**: "The effects of biology lab delivery mode on academic achievement in college biology".

## M.S.Ed. - Instructional Design and Educational Technology

Texas A&M University-Corpus Christi, Corpus Christi, Texas 12/2011

## **B.S.** - Biology

Texas A&M University-Corpus Christi, Corpus Christi, Texas 12/2008

#### Certifications

- Texas State Board of Educator Certification: Principal as Instructional Leader Certification (Grades EC-12)
- Texas State Board of Educator Certification: Science (Grades 8-12); Special Education Supplemental (Grades 8-12); Gifted and Talented Supplemental: Expected 08/2022
- Consortium for School Networking: Certified Education Technology Leader (CETL), Expected 12/2022
- Comp TIA: A+ Core 1 and 2. Expected 9/2022
- **IBM:** Data Science Professional Certificate, Expected 08/2022
- Treehouse Programming: Front End Web Development Certification; Digital Literacy Certification
- Lynda.com: Full-Stack Web Development Certification; UX Design

## INSRUCTIONAL DESIGN AND EDUCATIONAL LEADERSHIP EXPERIENCE

Sinton, TX **Sinton ISD** 8/2018-Current

Instructional Design and Educational Leadership Roles/Composite Science Teacher

Collaborates with administration in development, implementation, research, and evaluation of STEM curriculum and technology programs to meet district policies, goals, and objectives for instructional effectiveness and student achievement.

- Researches, develops, and creates STEM curriculum content for face-to-face, blended, and distance learning; integrates open educational resources (OERs), Virtual Learning Environments (VLEs), software, multimedia applications, and online learning websites to improve teaching.
- Keeps abreast of new methodologies and educational technologies to increase students' learning and engagement.
- Leads training sessions to support faculty/staff use of: software, multimedia, online, and web-based educational technologies; provides advice, recommendation of best practices, and instructional strategies for optimal course design.
- Collaborates with faculty/staff subject matter experts (SMEs) in coordinating and planning curriculum projects; leads and manages design, development, and review of science courses, content, and related learning materials and resources.
- Identifies instructional goals and opportunities for improvement; conducts course User Interface (UI) and User Experience (UX) research studies; uses data analytics to create and presents reports on user-centered learning experiences.

## **Summary of Major Accomplishments:**

Directed three educational technology leadership research projects focused on the strategic planning and management of educational technology to: develop, implement, and evaluate curriculum technology solutions for face-to-face, blended, and online learning; analyze complex technology-related needs to support teaching effectiveness, student learning, and school culture; and ensure the integrity of districtwide educational programming and services. Components of the projects included:

- Coordination with school principals and library staff to develop emergency procedures and a system for effective distribution of campus technology equipment and materials to meet district and school-community needs and support students' remote learning following COVID-19 school closure. Used collaborative processes to analyze and review campus technology management needs and establish related policies for school reopening.
- Development and implementation of training to support staff effectiveness in selecting Open Educational Resources (OERs), Virtual Learning Environments (VLEs), and software applications to revise curriculum and instruction within district budgetary limitations; and meet students' face-to-face, blended, and online learning needs.

- Use of expertise in instructional UI/UX design to develop and implement Learning Management Systems (LMS) to deliver Aquatic Science and Chemistry courses across three iterations of face-to-face, blended, and online learning during the 2019-2020 and 2020-2021 school years. Maintained servers and Learning Record Stores (LRS) to ensure integrity of student information; evaluated academic progress data to inform selection and revision of instructional documents, materials, and resources to improve curriculum implementation in face-to-face and blended classroom environments for the 2021-2022 school year.
- Collaboration with district administrative and educational department staff in implementation of research and needs
  analysis procedures and interpretation of survey and focus group data to evaluate employees' experiences in using
  computer network, hardware, and software applications for education and learning. Revised technology-related training
  and recommended technical solutions to ensure attainment of district goals and objectives for students' learning and
  educational effectiveness following reopening of schools.
- Analysis of data to identify school technology, training, and business needs; preparation of research-based literature
  reviews and presentations to: coordinate with senior management personnel in the strategic planning and development of
  goals and objectives for the continued implementation of OERs, VLEs, educational software, and related staff training;
  make recommendations of grant application funding for purchase of computer hardware, software, and supplies to inform
  future evaluation and improvement of district educational programming and services.

## Texas A&M University-Corpus Christi

Instructional Designer/Project Manager/Doctoral Research Assistant

Corpus Christi, TX 6/2014-6/2016

0/2014-0/20

- Worked with a team to convert a Texas A&M University-College Station science course into an online format.
- Implemented strong instructional design, course/learning materials development, and research skills; organized and maintained project faculty/staff meetings, reports, resources/materials, and budgets.
- Designed professional development training to support SMEs and course instructors' knowledge of the instructional design
  process and andragogy; provided guidance in students' use of online learning course materials and resources.
- Worked cooperatively with a team of SMEs, course instructors, and faculty/staff to design, develop, and review online, blended, and web-enhanced courses/modules; managed learning objectives and data to support course usability.
- Collaborated to present information via National Science Foundation (NSF) grant funded project reports, professional research publications, and conference presentations.

#### Texas A&M University-Corpus Christi

Corpus Christi, TX 8/2015-5/2016

Science Fair Project Manager/Doctoral Research Assistant

Assisted project director in planning, organizing, and conducting the Coastal Bend Regional Science Fair.

- Supervised project personnel, meetings, planning, databases, budgets, and financial records and reports.
- Designed and delivered educational technology professional development training to local school district instructional staff, students and their families, and other stakeholders to support use of project registration software applications and understanding of participation policies, procedures, goals, and standards.
- Effectively communicated to present information, training, and advice to project team; analyzed project needs and measured related outcomes; produced presentations and reports.

## SKILLS AND QUALIFICATIONS

- Instructional Design/Training/Online Course Development skills: Design, planning, development, implementation, evaluation/review/needs assessment, and revision of training and courses; including ADDIE, Agile, ARCS, Iterative Process, Lean, SAMR, Waterfall, and World Café models. Experience working on-site and remotely.
- Online course and Training Design skills for Education/Industry: Use of programming expertise and instructional UI/UX design principles, models, and frameworks to administer training and learning tools through web-based online courses and modules (Content Management Systems [CMS] and LMS), print, audio/video, and multimedia formats. Management of information systems databases, Learning Experience Platforms (LEP/LXP), and LRS to ensure compliance with AICC, Copyright Law, SCORM, OLC, QM, xAPI, ADA/FERPA/Section 508, W3C, and company standards.
- Instructional and Training Framework/Content knowledge: Expert knowledge of: Instructional design learning theories, frameworks, and pedagogies (Adult Learning Theory, Constructivism, Game Based Learning, Inquiry and Project-Based Learning, and STEM / STEAM), learning environments (eLearning, Blended, Case based, Face-to-Face, Instructor-led, Scenario based, and Virtual Instructor-led); alignment and revision of learning objectives, content, and assessments to meet education/training content quality criteria requirements.
- Instructional and Training Design Tools/Software: Expert proficiency in instructional design (Articulate Storyline/Studio/Presenter and Adobe Captivate/eLearning Suite), UI/UX design, wireframing, and prototyping (Adobe Creative Cloud Apps, Adobe Photoshop/Illustrator/XD, Sketch, OmniGraffle, Keynote), online learning (Canvas, Moodle, Blackboard, Softchalk, Lectora), and workplace (Cloud computing and MS Office suite) tools and software applications. Design and production of wireframes, prototypes, storyboards, modules, and complete online courses.

- Training Materials and Instructional Resources Design: Development and production of curriculum and instructional materials in a variety of formats including web-based (HTML, H5P, CSS, Flash, Javascript, jQuery, OER, PHP), print, graphics, audio/video (GoAnimate, YouTube, AfterEffects, and Camtasia), animation, and multimedia formats.
- Mobile/Web/Computer Applications Development and Programming skills: Expertise in development and implementation of full-stack / front-end web and Agile Software development to create learning applications and technologies for education and business. Expert proficiency in: Angular/AngularJS, AJAX, Bootstrap framework, CSS, C++, Dreamweaver, Git, jQuery, HTML 5, ES6, JavaScript, jQuery, JSON, LESS, PHP, PERL, Python, React, Ruby on Rails, Sass, Unity, Visual Basic, SQL, and XML.
- Project Management, Collaboration, and Communication skills: Instructional Design, Education, and Research Programs (IT Support and Training, budgets, staff and personnel, records, software resources/materials, meetings, and information). Excellent organizational, communication, and interpersonal skills (face-to-face, distance/remote, web-based, verbal, and written).
- Instructional Design/Educational Technology Research skills: International, federal, state, local, and institutional level grant writing, research presentation, and publication experience (National Science Foundation [NSF], Technology/Education plans, Professional Conferences). Expertise in data science, complex statistics, data analysis, collection, management, and reporting (Quantitative, Qualitative, Mixed Methods, and Program Evaluation) methodologies.

## RELATED PROFESSIONAL EXPERIENCE

**Tuloso-Midway ISD** 

Corpus Christi, TX

High School Composite Science Teacher/Educational Technology Facilitator

7/2009-5/2016

Served the educational needs of a diverse student population through planning, design, development, and review of instructional technologies, science curriculum, and training programs.

- Developed technology-enhanced science course/laboratory curriculum and resources, accessible and inclusive learning environments; increased students' state science exam pass rate success, 49 % (2009-2010) to 83% (2015-2016).
- Presented staff professional development and provided training materials to support use of computer network, hardware, software, and multimedia applications; made key recommendations of instructional strategies to support curriculum design and development and educational technology knowledge.
- Worked with SMEs, faculty, and staff to review and present information on technology training and STEM learning trends, including the learning experiences of teacher and student end-users; maintained course resources/materials.
- Collaborated to effectively analyze data; develop web-based information management systems to monitor students' learning and technology needs; author campus and district improvement plans; and maintain budgets and records.

Flour Bluff ISD Corpus Christi, TX 8/2008-5/2009

Campus Educational Information Technologist

Managed campus technology support; developed training and comprehensive technology plans to meet the educational and administrative goals and objectives of the campus, district, and community.

- Led training for development of SMEs, faculty/staff, and students' use of educational technologies: online learning and web-based instructional software; computer systems; and audio, video, and multimedia applications.
- Applied instructional design best practices to lead faculty and staff in use of appropriate technologies and make recommendation of technology-related strategies for design and development of courses and learning materials/resources.
- Created reports for management and review of campus educational technology support needs.
- Maintained budgets, related grants, and schedules to oversee acquisition of campus technology, funding, and support.

## Texas A&M University-Corpus Christi

Corpus Christi, TX

Faculty Computer Hardware/Software Support Technician

5/2006-6/2008

Faculty Computer Technical Support Helpline Technician

2/2005-5/2006

Effectively provided training to support instructional staff use of campus educational technology resources and applications.

- Developed training and learning materials/resources and tools, to support faculty and staff use of: learning management systems and online courses; computer software/hardware, audio/video, and multimedia applications.
- Evaluated technology support needs, budgets, and inventory; made recommendations for purchase of technology; maintained related documents and records.
- Used excellent communication skills, collaborated with Information Technology department personnel to ensure support goals and objectives were met.

## RELATED INSTRUCTIONAL DESIGN AND EDUCATIONAL TECHNOLOGY RESEARCH

#### **International and National Conference Presentations**

- **McQueen, J.** (2022, July). Where we were, where we are, and where we are heading: gifted education and data science perspectives on lessons learned from design, implementation, and evaluation of virtual learning environments. A concurrent session presentation for the 2022 Mensa Annual Gathering conference, Sparks, NV.
- **McQueen, J.** (2021, August). Blending Giftedness: Recommendations for using learning technologies to ensure instructional continuity and differentiation for gifted students in physical, blended, and online learning environments. A concurrent session presentation for the 2021 Mensa World Gathering annual conference, Houston, TX.
- **McQueen, J.,** & Cifuentes, L. (2017, November). *The effects of biology lab delivery mode on academic achievement in college biology.* A concurrent session presentation for the 2017 International Association for Educational Communications and Technology annual conference, Jacksonville, FL.

## **Delivered Professional Development**

- McQueen, J. A. (2020, January). Virtual learning environments and Open Educational Resources for instructional differentiation. Professional development presentation and training session delivered to high school educators, Sinton, TX.
- McQueen, J. A. (2019, April). *Instructor Presence and Learner Control as a model for instructional differentiation in Virtual STEM Learning Environments*. A concurrent session for the 2019 SUPCE: School and University Partnership Conference for Education conference, Corpus Christi, TX.
- McQueen, J. A. (2018, June). Labs without limits: Research and evidence-based application of virtual laboratory affordances in promoting instructional differentiation best practices and achievement for special learning populations in STEM subjects. A concurrent session for the 14th annual ME by the SEa conference, Corpus Christi, TX.
- Jeffery, T. & McQueen, J. A. (2015, October). Science fair seminar 2015: Preparing for the 2015-2016 science fair season. Coastal Bend Regional Science Fair workshop presentation at TAMU-CC, Corpus Christi, TX.
- McQueen, J. (2010, September). Flip for science! Increasing students' science comprehension through use of Flip Cameras and Smartboards. Professional development and training session delivered to district educators for the 5th Annual Tuloso-Midway ISD "Teaching with Technology Day" district conference, Corpus Christi, TX.

## Instructional/UX Design, Education, and Scientific Technology Projects

- McQueen, J. A. (August, 2021-current). Dr. McQueen's Science Moodle (third iteration). Retrieved November 21, 2021, from Dr. McQueen's Science Moodle Web site: https://moodle.jaimemcqueenphd.com/moodle. Design and implementation of blended and virtual science curriculum, open educational resources, and courses using Moodle LMS, based on research data and results of the initial and second iterations of the project.
- McQueen, J. A. (August, 2020-May, 2021). Dr. McQueen's Science Moodle (second iteration). Retrieved January 21, 2021, from Dr. McQueen's Science Moodle Web site: https://moodle.jaimemcqueenphd.com/moodle. Design and implementation of blended and virtual science curriculum and courses using Moodle LMS, based on research data and results of initial project.
- McQueen, J. A. (September, 2019-May, 2020). Dr. McQueen's Science Moodle (first iteration). Retrieved August 4, 2020, from Dr. McQueen's Science Moodle Web site: http://moodle.jaimemcqueenphd.com/moodle. Pilot design and implementation of blended and virtual science curriculum and courses using Moodle LMS, project was successful in maintaining students' learning and engagement following school closures due to COVID-19.
- Palmer, C., Riggs, P. K., Kasperbauer, T. J., Johnson, J., Cifuentes, L., Park, S. W., & McQueen, J. A. (2015). Genomics, Ethics and Society Course. Retrieved May 31, 2019, from National Academy of Sciences, onlineethics.org Web site: https://www.onlineethics.org/Resources/30931.aspx

## **SERVICE AND AFFILIATIONS**

#### Service

Area Member Coordinator, American Mensa. Corpus Christi, Texas (May, 2022-Current).

Area Gifted Youth Coordinator, American Mensa. Corpus Christi, Texas (September, 2017-Current).

School Science Fair Judge, 5th Grade Physical Sciences Category. Gloria Hicks Elementary, Corpus Christi, Texas (November, 2016).

Coastal Bend Regional Science Fair student worker. Corpus Christi, Texas (February, 2016).

Coastal Bend Regional Science Fair judge, Junior Division Life Sciences. Corpus Christi, Texas (February, 2014).

## **Affiliations**

Member, Association for Educational Communications and Technology (AECT)

Member, National Association of Secondary School Principals (NASSP)

Member, National Science Teachers Association (NSTA)

Member, Golden Key International Honour Society

Member, American Mensa