Taylor J Clements, PhD

Houston, TX

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Education

Ph.D. Education Sciences; **University of Kentucky** Spring 2018
Specialization: Educational Leadership

M.S. Data Science; **Eastern University** (exp) Spring 2027

M.A. Education; **Western Kentucky University** Spring 2012
GSkyTeach Cohort II

B.S. Mathematics; **Murray State University** Spring 2011
Honors Diploma
Minor: Music

Employment

Enterprise Analytics Translator Fall 2025 - Present
Sysco
Managing multiple analytics and data science initiatives across merchandising, pricing, supplier funding, and operational reporting, with a focus on high-impact, enterprise-scale use cases. Partnering with business leaders, product owners, and technical teams to translate complex business problems into well-defined analytical requirements, models, and decision frameworks. Leading end-to-end project execution, including prioritization, stakeholder alignment, data sourcing, modeling, validation, and delivery of actionable insights. Designing and overseeing data models, statistical analyses, and machine learning approaches to identify anomalies, measure performance, and support informed decision-making. Communicating analytical results clearly to both technical and non-technical audiences to drive adoption, accountability, and sustained business value.

AI Engineer Spring 2026 - Present
Cignition, Inc
Remote/Part-Time
Building automated post-session feedback and coaching pipelines for a tutoring organization, working part-time alongside a full-time role at Sysco. Designing and deploying an automation pipeline (LangChain, DeepSeek V4 Pro via Lightning AI) that ingests session transcripts, calculates talk-time and engagement metrics, and generates structured JSON and Markdown feedback reports for tutors and managers, replacing a manual reporting process. Architecting a standalone retrieval-augmented generation (RAG) system that grounds feedback in internal instructional guidance, chunking source documents, generating embeddings (sentence-transformers, all-MiniLM-L6-v2), and indexing them in ChromaDB for semantic retrieval. Engineering prompt templates with structured output constraints and guardrails to keep generated feedback consistent,

on-guidance, and free of hallucinations. Handling edge cases such as absent or partial transcripts to ensure reliable, production-grade output across both tools.

Program Manager & Co-Director of Curriculum and Instruction Spring 2021- Fall 2025
Cignition, Inc
Remote
Managing multiple projects regarding partnerships, business relationships, curriculum and instruction, marketing materials, data, literature, and research. Working with educational leaders and teachers to help ensure that students are learning effectively through an inquiry-focused group-tutoring environment. Creating and aggregating curriculum appropriately for schools and districts based on standards and needs that specifically cater to student learning and engagement. Screening, interviewing, training, and leading professional development for tutors to help reinforce high-level pedagogy and engagement. Managing data, logistics, personnel, and calendars for school sites.

Director of Innovation and Design
Christchurch School Fall 2019 - Spring 2021
Christchurch, VA
Supervisor of the MakerSpace and facilitator of classes on design-thinking, coding, engineering, entrepreneurism, and topics in design and technology. Creating and developing external partnerships for off-campus learning experiences. Administrator and educational leader for Canvas. Assisting in leading digital instruction and asynchronous pedagogy. Chair of the Mathematics department and responsible for coordinating mathematics pedagogy and classroom leadership. Campus duties include coaching robotics, coaching endurance running, and various dorm duties.

Instructor
Johns Hopkins University, Center for Talented Youth Fall 2019 - present
Remote
Instructor of an online and modular Geometry course for advanced high schoolers from around the world. Duties include conducting individual help sessions, contacting parents, and providing guidance on content.

Murray State University, Commonwealth Honors Academy Spring 2017 - present
Murray, KY
Instructor of an undergraduate course to advanced high schoolers from Kentucky and surrounding states as a faculty member of the Commonwealth Honors Academy. The course focuses on design-thinking, engineering, and building rube-goldberg machines.

Culver Academies Fall 2017- Spring 2019
Culver, IN
Instructor of Intermediate Algebra and Elements of Calculus to 10th-12th grade students. On the Technology Support Committee and participated in a Curriculum Leadership Team as well as multiple PLCs in the mathematics department. Weekly duties included Barracks Inspector Duty and tutoring students with mathematics.

Bellarmine University Summer 2017
Remote
(Adjunct) Instructor of an online graduate course on research methodology for school leaders. Students were predominantly secondary educators in the Louisville area.

Atherton High School, Jefferson County Public Schools Fall 2013- Spring 2017
Louisville, KY
Taught College Algebra, Geometry, Algebra II, Calculus. Actively participated in PLC and continued professional development. SBDM Council member Fall 2015-Spring 2017. Lead education technology sessions and structure mathematics learning management system

Waggener High School, Jefferson County Public Schools Fall 2012- Spring 2013
Louisville, KY.
Taught Algebra II, Algebra II, College Algebra, Algebra I. Actively participated in PLC and continued professional development. Co-chaired Technology integration committee.

Instructional Designer
Just a Taste Winter 2018- Spring 2023
Saint James, MO
Develop and implement a learning management system, courses, and assessment for employees at multiple locations (Consulting Role).

Research Collaboration
College Preparatory Mathematics: Teacher Research Corps Summer 2016- Spring 2017
Designing and implementing action-research projects to develop effective strategies teaching and learning in the mathematics classroom.

Teacher Leader
The Fund for Transforming Education in Kentucky Fall 2014- Fall 2016
Working with teacher leaders from across the state on defining and enacting teacher leadership. Projects included a teacher-directed journal and conference presentations.

Certifications

4Geeks Data Science Bootcamp 2025-present

School Technology Leadership Graduate Certificate; *University of Kentucky* 2016-present

Mathematics 8-12 Kentucky Teacher Licensure 2015-2019

Publications

Clements, T. (2018). *Informal teacher leadership for technology integration: A multi-site case study of distributed leadership* (Published doctoral dissertation). Retrieved from https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=1040&context=edsc_etds

Clements, T. (2016). Deeper learning. *Paradigm Teaching Journal*. Retrieved from http://www.paradigmteachingjournal.com/deeper-learning-by-taylor-clements.html.

Clements, T. (2016). Backchanneling in the PLC. *CPM September Newsletter.* Retrieved from http://pdfs.cpm.org/newsletters/CPM_NL_Sep_2016.pdf.

Clements, T. (2016). CPM 2016 national conference reflection. *CPM September Newsletter.* Retrieved from http://pdfs.cpm.org/newsletters/CPM_NL_Mar_2016_final.pdf.

Professional Development & Workshops

Planning Committee

ECET2LOU, Louisville, KY (2017). Worked with a committee of people to design and implement a teacher-centered conference. Elevating and Celebrating Effective Teaching and Teachers (ECET2) conferences are designed by teachers for teachers. This conference served about 250 teachers from Jefferson County Public Schools.

Reviewing Committee

International Society for Technology in Education (ISTE), Philadelphia, PA (2019). Reviewed and adjudicated posters that were submitted for the international conference.

National

Clements, T. & Cohen, M. (2023). Unlock student success with Cignition's Collaborative Learning Approach. *EdTech Week by StartEd*. New York City, NY. Exploring and elaborating on how student-centered and collaborative tutoring is more effective even in a digital environment for conceptual learning in mathematics and ELA.

Clements, T. (2022). Collaborative and digital group learning: Lessons from research. *College Preparatory Mathematics National Conference*. San Francisco, CA. (Digital Workshop). Participants explored research-based findings on collaborative digital learning for mathematics.

Clements, T. (2018). Digital "poster" tools: Sharing student learning. *College Preparatory Mathematics National Conference*. San Francisco, CA. Working with mathematics teachers to strengthen sharing student work with digital tools.

Clements, T. (2018). Using performance-based tasks in the CPM classroom. *College Preparatory Mathematics National Conference*. San Francisco, CA. Providing examples

and working with secondary mathematics teachers to develop effective performance-based assessments.

Rendon, S. & Clements, T. (2017). Using Twitter for learning and teaching: The growing CPM teacher. *College Preparatory Mathematics National Conference*. San Francisco, CA. Developing secondary mathematics teachers to become growing professionals through using Twitter to expand a professional learning network.

Clements, T. (2016). What's a learning management system and how do I use it for math? *College Preparatory Mathematics National Conference*. San Francisco, CA. Working with mathematics teachers to use an LMS effectively for teaching at the middle and high school level. Workshop using Canvas by Instructure and Google Classroom.

Clements, T., Schneider, E. (2015). Study team & teaching strategies in a 1:1 classroom. *College Preparatory Mathematics National Conference*. San Francisco, CA. How to incorporate effective study team strategies into a device-rich learning environment.

State

Clements, T. (2020). Design thinking and coding. *Spark- Hackathon.* Charlottesville, VA. Using design-thinking as a way to structure products and services for the end-user with empathy.

Clements, T. (2016). How to Google Classroom (math edition). *KEA (Kentucky Education Association) Let's TALK: Conversations about Effective Teaching and Learning*. Covington, KY. Workshop to develop middle and high school math teachers to use Google Classroom as a learning tool.

Clements, T. (2016). Using Desmos as a tool for teaching and learning mathematics. *KEA (Kentucky Education Association) Let's TALK: Conversations about Effective Teaching and Learning*. Covington, KY. Using Desmos, an interactive and engaging graphing calculator, as a learning tool in the math class.

Clements, T. (2015). Edpuzzle in the classroom. *Girardeau Public Schools*. Cape Girardeau, MO. A workshop with district administrators on using Edpuzzle as a tool for teaching and learning.

Region/District/School

Clements, T. & Upadhyay, H. (2017). I am a leader. *ECET2LOU*. Louisville, KY. Exploring the Kentucky Teacher Leadership Framework and working to develop a vision for Teacher Leadership in Jefferson County Public Schools.

Clements, T. & Upadhyay, H. (2017). Authentic assessment. *ECET2LOU*. Louisville, KY. Leading teachers to develop authentic assessments and projects based on soft skills instead of content.

Clements, T. & Upadhyay, H. (2017). Des-talks #2. *Gheens Academy, Jefferson County Public Schools.* Louisville, KY. Workshop with district teachers on transforming traditional methods to teaching high school math with the use of integrated digital tools in Desmos.

Clements, T. & Upadhyay, H. (2016). Des-talks #1. *Seneca High School, Jefferson County Public Schools.* Louisville, KY. Workshop with district teachers on transforming traditional methods to teaching high school math with the use of integrated digital tools in Desmos.

Clements. T. (2016). Using Edpuzzle as a tool for learning. *Atherton High School, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2016). How to google classroom (high school math edition). *Technoversity Day 3, Jefferson County Public Schools.* Louisville, KY. Workshop on integrating Google Classroom into teaching and learning. Designed specifically for teachers in JCPS educators (K-12).

Clements, T. (2016). Utilizing Canvas by instructure as a teaching and learning tool. *Technoversity Day 3, Jefferson County Public Schools.* Louisville, KY. Workshop on using Canvas as an LMS and a learning tool. Designed specifically for teachers in JCPS educators (K-12).

Clements, T. (2016). Recipe for coding club from scratch. *Technoversity Day 3, Jefferson County Public Schools.* Louisville, KY. A how-to guide for teacher leaders who want to start a student-centered coding club. Designed specifically for teachers in JCPS educators (K-12).

Clements, T. (2016). How to google classroom (high school math edition). *Technoversity Day 2, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2016). Utilizing Canvas by instructure as a teaching and learning tool. *Technoversity Day 2, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2016). Recipe for coding club from scratch. *Technoversity Day 2, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2016). Recipe for coding club from scratch. *Technoversity Day 1, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2016). Utilizing Canvas by instructure as a teaching and learning tool. *Technoversity Day 1, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2016). How to google classroom (high school math edition). *Technoversity Day 1, Jefferson County Public Schools.* Louisville, KY.

Clements, T. (2014). Texting: Safe and effective. *Technoversity, Jefferson County Public Schools.* Louisville, KY. How teachers can use 'Remind' to communicate with parents, teachers, and students to support learning in the classroom and for extra-curricular activities.

Clements, T. (2014). Assessments with Google. *Technoversity, Jefferson County Public Schools, Louisville, KY.* How to use Google Forms to create formative assessments for students.

Clements, T. (2014) Publishing projects to the interactive web. *Technoversity, Jefferson County Public Schools*. Louisville, KY. Workshop on using Google Apps for Education and Twitter to share student projects on the internet.

Clements, T. (2015). Using Canvas as a learning management system. *Atherton High School, Jefferson County Public Schools.* Louisville, KY. Workshop with Atherton High School teachers on using Canvas to increase student learning in a BYOD environment.

Clements, T. (2015). Bring your own device. *Atherton High School, Jefferson County Public Schools.* Louisville, KY. Workshop with Atherton High School teachers on how to utilize phones in the classroom. Included strategies for using devices in the classroom.

Clements, T. & Marsh, J. (2013). Mypad, yourpad, whypad? iPad! *Waggener High School, Jefferson County Public Schools.* Louisville, KY.

Clements, T. & Marsh, J. (2012). Mypad, yourpad, whypad? iPad! *GSkyTeach Program, Western Kentucky University.* Louisville, KY.

Presentations

National

Clements, T. (2018). Two masters: Navigating project-based learning and traditional assessments. *College Preparatory Mathematics National Conference*. San Francisco, CA. A 5-min *Ignite* session for all conference attendees.

Day, M., Clements, T., Marsh, J. (2013). Mypad, yourpad, whypad? iPad! *National Science Teachers Association National Convention*. San Antonio, TX. A survey of tools that teachers can use to utilize iPads in the math and science classroom.

State

Clements, T., Marsh, J. (2015). Horton hears a 1:1 initiative without innovative leadership. *Kentucky Society for Technology in Education, Spring Conference.* Louisville, KY. Examining failed 1:1 technology initiatives and discussing why they were unsuccessful.

Marsh, J., Clements, T. (2015). Session for teachers who can't tweet good (and who wanna learn to do other stuff good too). *Kentucky Society for Technology in Education, Spring Conference*. Louisville, KY. An introductory session on using Twitter for teaching in learning in the classroom as well as a tool for professional development.

Clements, T. (2014). Recipe for coding club (from scratch). *Kentucky Society for Technology in Education, Fall Conference*. Lexington, KY. A how-to guide for teacher leaders who want to start a student-centered coding club.

Clements, T. (2011). The role of mathematicians in the development of the western musical scale. *Kentucky Honors Program Roundtable*. Frankfort, KY. Presentation on undergraduate honors research thesis. Research focused on the role of mathematicians in the development of the western musical scale.

Clements, T. (2008). Boundaries of complex polynomials and their roots. *Kentucky Mathematics Association of America*. Bowling Green, KY. Presentation on research for finding zeros of higher degree polynomials. Undergraduate research project at Murray State University.

Region/District/School

Clements, T. (2021). Secondary Math 2.0 with Desmos. *Lehigh University, Student Teacher Technology Conference 2021. Remote*

Clements, T. (2012). Freedom of expression for teachers and students. *GSkyTeach Program*. Louisville, KY. A review of case laws regarding freedom of expression for teachers.

Clements, T. (2012). Effect of question type of open-ended assessment items on quality of response. *GSkyTeach Program.* Louisville, KY. A presentation of action-based research on the style of assessment questions and how students answer them.

Clements, T. (2011). The role of mathematicians in the development of the western musical scale. *Murray State University Scholar's Week*. Murray, KY.

Clements, T. (2008). Boundaries of complex polynomials and their roots. *Murray State University Scholar's Week*. Murray, KY.

Honors & Programs

2025 Under 40 at the Top, Western Kentucky University

2021 Top 22 Under 40, Murray State University

2020 University of Kentucky Teacher Who Made a Difference Award Recipient

2018 Kentucky Teacher of the Year Nominee

2018 Valvoline Teacher Achievement Award Recipient

2017 Jefferson County Public Schools Algebra II Teacher Leadership Cohort. Louisville, KY

2016 The Fund for Transforming Education in Kentucky. *Innovative Teacher Leader, Cohort I.*

2015 College Preparatory Mathematics (CPM). *Academy of Best Practices, Cohort I.* Seattle, WA

Grants & Scholarships

Clements, T. (2017). Jefferson County Teachers Association/Kentucky Education Association Advancing Teacher Scholarship- Rank 1 Recipient

Clements, T. (2016). Arvel and Ellen Turner Thacker Research Grant. *University of Kentucky College of Education.*

Clements, T. (2014, 2015, 2016, 2018). National Conference Travel Grant. *College Preparatory Mathematics (CPM)*

Clements, T. (2015) University of Kentucky. *College of Education Scholarship Recipient*.