**KYMATYC**



**45th Annual Meeting**

**Historic Boone Tavern**

**Berea, KY**

**Friday, February 22nd &**

**Saturday, February 23rd, 2019**

*All times are local time (eastern time)*

**A special thanks to the following KYMATYC Sponsors.**

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**Forty-Fifth Annual Meeting of KYMATYC**

## Conference Agenda

### Friday, February 22nd, 2019 *All times are local time (eastern time)*

**12:00 - ?? PM Registration**

**1:00 - 2:15 Concurrent Session #1**

Event Center

*Presenter: Don Barnes – Hazard CTC*

*Presider: Scott McClendon – Somerset CC*

**Add Some Flash to Your Class**

Often students won’t read the announcements concerning any assignments due in an online class. Using Powtoon software, a multimedia presentation can be made to try to entice the students into paying attention to the announcements, lectures, or any other information which needs to be relayed to them. The software can be used free with additional features available with a paid subscription and can be incorporated anywhere you can link to a Youtube video. The results are not in as to the effectiveness of this tool since this is the first semester of use in class, but it really can make some interesting videos you can incorporate into your online classes. Let your imagination tell you how you can use Powtoon!

Coyle Gathering Room-A

*Presenter: Billy Jackson – University of Louisville*

*Presider: Brandon Bartley – Jefferson CTC*

**Professional Development Opportunities for Math Faculty Teaching Courses for Future Elementary Teachers**

In this session, we will discuss a new professional development opportunity for instructors who are relatively new to teaching content courses for future elementary teachers. Recent studies (e.g. Masingila et al., 2012) suggest that over 40% of future elementary and middle school teachers take most, if not all, of their mathematics courses at two-year colleges. Over 80% of 2-year institutions reported offering courses designed specifically for this student population. It is well documented that less than half of the instructors for these courses have any K-12 teaching experience, and as a result many instructors frequently report difficulty in finding support in their efforts to become knowledgeable and aware of good practice of what the content of the courses is meant to be and how that content is meant to be delivered. In response to this need, our NSF funded project team is in the process of designing and implementing an online 15-hour short course to allow instructors at 2- and 4- year institutions to work in pairs with the goal of learning about available instructional resources for the courses in addition to the teacher education community’s call for what the content and implementation of the courses are meant to be. Participants will have the opportunity to participate in a task designed for the short course and given to our faculty participants and provide their insights as to what they believe our participants could take away from enacting the task during the short course.

**1:45 - 2:15 Concurrent Session #1\***

Coyle Gathering Room-B

*Presenter: Victoria Paige Cloud – Bluegrass CTC*

*Presider: Jeff Herrin - Bluegrass CTC*

 **Find the Humor in Math: Building Rapport in the Classroom**

Even math class can be fun for those students who do not enjoy math. This presentation gives techniques and discusses increasing student engagement through humor.

**2:25 – 3:15 Concurrent Session #2**

Event Center

*Presenter: John Ward- Jefferson CTC*

 *Presider: Scott McClendon – Somerset CTC*

**Statistics Kahoot Challenge**

Come and compete with your colleagues to see who is the best at knowing the answers to counter-intuitive statistics trivia, math puzzles and topics taught in statistics literacy, STA151. This presentation is useful as an introduction to statistical thought and critical thinking and can be a great way to fill a course day with a fun and informative activity in any mathematics course.

Coyle Gathering Room-A

*Presenter: Jon Oaks, Macomb Community College – AMATYC Midwest Regional Vice-President*

*Presider: Brandon Bartley – Jefferson CTC*

**Everyday Math for Everyday People**

Math is everywhere we look. What if instead of stopping to smell the roses, we stopped every once in a while to look for the math? The presenter will share some pictures and participants will have the chance to do just that - stop and look for the math. This presentation will be full of everyday math for everyday people that teachers can use to help students better understand the material.

Coyle Gathering Room-B

*Presenter: Jennifer Ackerman – Jefferson CTC*

*Presider: Jeff Herrin – Bluegrass CTC*

 **A Pre-calculus Project in DESMOS: Building a Roller Coaster**

Bring a laptop, tablet, or smartphone along with your creativity! See how you can integrate technology to build understanding of mathematical properties (increasing, decreasing, maximum, minimum, domain, range, etc). Learn some of the features of DESMOS - see how intuitive it is to learn to use this FREE app!

**3:20-3:50 Break Visit Exhibitor’s Tables and enjoy the refreshments!**

**3:55-4:45 Concurrent Session #3**

Event Center

*Presenter: Dave Sobecki – Miami University Hamilton*

*Presider: Scott McClendon – Somerset CC*

**Tales From the Front Lines: One Guy’s Thoughts on Teaching in a Collaborative Environment**

As the non-STEM pathways movement has gained steam nationwide, an exciting new world of collaborative learning in the math classroom has opened. From math literacy at the dev level to QR and Statistical Literacy at the college level, discovery learning and productive struggle are threatening the dominance of traditional lecture, and it’s about time! I’ve been deeply involved in this movement, and have many thoughts and stories to share from personal experience in the classroom, and from traveling all over these here United States working with and learning from college math instructors. I’d love to share them with you, and hear some of your stories from the front lines.

Coyle Gathering Room-A

*Presenters:* *Jennifer Ackerman and Drew Wilkerson - Jefferson Community and Technical College*

*Presider: Brandon Bartley – Jefferson CTC*

**Co-requisite Course Redesign Decisions (Title III)**

Co-requisite courses come in different shapes and sizes. What are some of the decisions to consider? What are some of the benefits of having a 2 credit-hour co-requisite course? We’ll provide an update for our MAT 146 co-requisite, currently in its third year, as well as describing our efforts to develop a new STA 151 co-requisite and begin our College Algebra course redesign.

Coyle Gathering Room-B

*Presenter: Tina Ragsdale – West Kentucky CTC*

*Presider: Jeff Herrin – Bluegrass CTC*

 **Active Learning Activities for Stats**

While developing the new STA 151 , Introduction to Applied Statistics, course, I used active learning strategies. I will share examples of the activities I used and provide some ideas for how you can use these to create activities for your courses.

# **4:45-5:00 Small Break Visit Exhibitor’s Tables while Coyle is being set up for the Keynote.**

**5:00-5:15 KYMATYC WELCOME – Door Prizes in the Coyle Gathering Room shortly before Keynote.**

**5:15 – 6:15 Keynote Address**

# Coyle Gathering Room

#  *Presenter: Eric Gaze – Bowdoin College*

*Presider: Brandon Bartley – Jefferson CTC*

**From Math Literacy to Quantitative Literacy**

This presentation will explore elements to consider for a Quantitative Reasoning course that addresses the challenge of empowering people to think quantitatively about every day issues, by providing a firm foundation in proportional reasoning and modeling with spreadsheets.  *QR curriculum is distinguished from traditional mathematics in that the context drives the content in QR, and in teaching QR: “content is inseparable from pedagogy and context is inseparable from content.” (*[*p. 18 NCED*](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.maa.org%2Fsites%2Fdefault%2Ffiles%2Fpdf%2FQL%2FMathAndDemocracy.pdf&data=02%7C01%7Cbrandon.bartley%40kctcs.edu%7Cc5fc057c84f644f54e4608d6809bf423%7Cf2e339511ec44c72b2bfa4f4671d64af%7C0%7C0%7C636837804653056916&sdata=9lSmgVh45C7JOeC6ZCl%2BCKLqCvFha5GMfBxWwCHuRoc%3D&reserved=0)*)  To develop in our students the habits of mind of a numerate citizen we must engage them with course material and pedagogical approaches embedded in meaningful, real contexts.*  To this end, we will discuss the use of articles and reading assignments alongside worksheets and problem based learning.  Assignments that scaffold QR skill development while deepening students’ reasoning capabilities will be discussed.

 Bio:

Eric Gaze directs the Quantitative Reasoning (QR) program at Bowdoin College, is Chair of the Center for Learning and Teaching, and is a Senior Lecturer in the Mathematics Department.  He is the current President of the National Numeracy Network (NNN 2013 – 2019), and a past chair of SIGMAA-QL (2010-12).  He has a QR textbook in its second edition 2019 published with Pearson, *Thinking Quantitatively: Communicating with Numbers*, with blog [https://thinkingquantitatively.wordpress.com/](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fthinkingquantitatively.wordpress.com%2F&data=02%7C01%7Cbrandon.bartley%40kctcs.edu%7Cc5fc057c84f644f54e4608d6809bf423%7Cf2e339511ec44c72b2bfa4f4671d64af%7C0%7C1%7C636837804653056916&sdata=I4gJ7J1SKUCmzV7%2B2sRvBGAfEM%2F7wE94nMOmm2UADI0%3D&reserved=0) .  Eric has given talks and led workshops on the topics of QR Across the Curriculum, Creating a QR Entry Point Course, Writing with Numbers, QR Assessment, and Running a QR Program; and has served on review teams of QR programs. Eric was the Principal Investigator for a NSF TUES Type I grant (2012-14), *Quantitative Literacy and Reasoning Assessment*(QLRA) DUE 1140562. This collaborative project builds on Bowdoin College's QR instrument which is used for advising purposes and is available to interested schools. Prior to coming to Bowdoin, Eric led the development of a Masters in Numeracy program for K-12 teachers at Alfred University as an Associate Professor of Mathematics and Education.

**6:30** **Dinner -** Event Center

**7:30 Ignite Session -** Event Center

*Presider: Pat Riley, Hopkinsville Community and College*

Check out the ignite session. Those who did not want to present a full session but have an idea or issue they wish to share and session presenters have the opportunity to summarize their presentations. They have exactly 5 minutes in a fast paced, whirlwind, idea sharing session. This session will last as long as there are presenters.

**8:30 – 10:00** **“After Math” Reception -** Event Center

Come join us for light and lively conversation, food and drinks. Play some games, catch-up with friends, and network with colleagues and vendors.

**Saturday, February 23rd, 2019**

**7:00 AM** **Breakfast** **Dining Room**

**8:00** – ?? **Registration**

**8:15 – 9:30 Concurrent Session #4**

Event Center

*Presenters: Sherry McCormack, Pat Riley, and Arthur Schultz – Hopkinsville CC*

*Presider: Jennifer Ackerman, Jefferson CTC*

**Quantitative Reasoning Activities – What They Wouldn’t Let Us Show in Orlando**

At the 2018 Orlando AMATYC Conference, we were told we could not use any Disney-related items in our session on Quantitative Reasoning Activities. We are happy to share some of our favorite examples and problems from Disney Animated Movies, Star Wars, and the Marvel Cinematic Universe to bring math into areas that don’t seem like math problems….which the students really respond well to!.

**8:40 – 9:30 Concurrent Session #4\***

Coyle Gathering Room

*Presenter: Dwight P. Smith – Big Sandy CTC*

*Presider: Scott McClendon – Somerset CTC*

**Newton vs Leibniz: The Great Calculus Feud**

Isaac Newton and Gottfried Leibniz are both credited with the invention of Calculus. This led to a famous feud between them and their supporters as to who should get the credit. The battle was still raging when Newton died in 1727. It still is a subject of conversation, even today. In this talk, I plan to present the facts on the controversy, and encourage the participants to form their own opinions. Even a debate here is welcome, but please keep it civil! (Don’t shut down the Government over it!)

**9:40 – 10:30 Concurrent Session #5 - Exhibitor Presentations (Commercial)**

Event Center

*Presenter: Beth Hobbs – Pearson Education*

*Presider: Brandon Bartley – Jefferson CTC*

 **Co-requisite Strategies and Solutions**

When thinking about those courses moving to coreq solutions, we want you to think about how you can get the most out of MyLab math.  And we’ll help you with that.  There are so many approaches you can take and so many resources to help you.  Too often though MyLab is looked at as just a homework system.  So we really want you to understand what’s available to help you get the most out of your coreq.

Coyle Gathering Room

*Presenter: Brad Forrester – Knewton*

*Presider: Jeff Herrin – Bluegrass CTC*

**Discover alta: Knewton’s Fully Integrated Adaptive Learning Corseware**

Knewton’s alta is the modern courseware you’ve been waiting for and works well for traditional, online, emporium courses, etc. Developed on Knewton’s expertly-designed adaptive technology that has been delivering impactful and personalized learning globally since 2009, alta is the first fully integrated adaptive learning courseware to incorporate high-quality open educational resources (OER), comply with WCAG 2.0 ADA standards, seamlessly integrate with Blackboard, work on any device, and is affordable to students at only $39.95/course per student, per semester. Courses available for Developmental Math through Calculus III and also Statistics, as well as Co-Req courses. Join our session to learn more about alta and teach your class your way with confidence your students are with you. [www.knewtonalta.com](https://kctcs-my.sharepoint.com/personal/brandon_bartley_kctcs_edu/Documents/Desktop/KYMATYC/2019%20Conference/www.knewtonalta.com)

**10:40 - 11:30 Concurrent Session #6**

Event Center

*Presenters: Kausha Miller – Bluegrass CTC and Scott Taylor – Henderson CC*

*Presider: Scott McClendon – Somerset CC*

**KCTCS New Mandatory Placement Policy**

With CPE’s new Admissions Regulation, the KCTCS Assessment & Placement Policy has changed significantly. Additionally, Mathematics Pathways have impacted mathematics course offerings. This session will provide a brief overview of both and will allow participants to ask questions.

Coyle Gathering Room

*Presenters:* *Tiane Ellis – Jefferson CTC*

*Presider: Linh Tran, Jefferson CTC*

**Yearning for Active Learning**

Come prepared to participate in an interactive session that demonstrates several Active Learning techniques. From entrance/exit tickets to relay races, games, and more. Experience all of the benefits of active learning.

**11:30-11:45 Break Enjoy some snack food and conversation!**

**11:45 Business Meeting** - Event Center

***Kentucky Mathematical Association of Two-Year Colleges Executive Board 2018-2020***

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