

“STEAM DAY” ON THE TOMPKINS CORTLAND COMMUNITY COLLEGE CAMPUS IN DRYDEN, NY

These sessions took place on August 22, 2024, *in-person*. Therefore, the audio and video quality varies and not all workshop aspects (such as small group work & discussions) were recorded.

* Select the session title hyperlink to view that recording. For CollegeNow to track viewership of the below sessions, please complete this [form](#).
In the [form](#), enter 8/22/2024 as the date and check *Attended a conference/workshop* for Q5. *

[CollegeNow’s Google Drive](#) has materials for all courses. I have linked to each workshop’s materials below.

*For workshops with a *sharing ideas folder*, please add your own contributions!*

9:00 – 9:10	Welcome					
9:10 – 10:20	Plenary: “ Culturally Responsive Teaching and the Brain ” with Michele Whitecraft					
10:30 – 12:00	Activities for Learning Statistics Concepts Materials	Bridging Classroom Coding with Workforce Skills	Physics in 3, 2, 1! Sharing ideas folder	Anatomy & Physiology Discussion Sharing ideas folder	Graphic Design Makerspace <i>No recording</i>	Restorative Practices for Educators
12:10 – 12:50	Lunch					
1:00 – 2:30	Use of AI in Math Classes Materials	Technology/ Engineering Pathways Materials	Inclusivity in the Biology Classroom Materials	Chemistry in 3, 2, 1! Sharing ideas folder	Graphic Design Makerspace <i>No recording</i>	Orientation for New CollegeNow Instructors <i>(recorded 8/20)</i> CollegeNow Materials & Orientation folder

We appreciate feedback in the evaluation form:

<https://www.surveymonkey.com/r/August22campus>

CollegeNow Conference 2024

THURSDAY, AUGUST 22 – STEAM DAY!

(On-Campus Sessions)

Tompkins Cortland Community College campus in Dryden ([Google Maps](#))

Participant Evaluation: <https://www.surveymonkey.com/r/August22campus>

PLENARY

Culturally Responsive Teaching and the Brain – 1 hr recording

Presenter: Dr. Michele Whitecraft (Chemistry Faculty at TC3)

In this presentation, Dr. Whitecraft will draw upon the works of Hammond, Gorski and Hebb to demonstrate how experiences that are intense, prolonged or repeated will physically change the anatomy and the chemistry of the brain. We can think of culture as the software that programs the hardware-- the brain. We will also explore the different parts of the brain to better understand the evolution of the brain and why Maslow must come before Bloom. Through an understanding of social neuroscience, we will discuss different cultural archetypes and the chemicals that promote or inhibit learning. Finally, we will share beautiful footage of neurons participating in the re-wiring of the brain as well as culturally responsive practices that promote the growth of new neural networks.

MORNING BREAKOUT OPTIONS

Activities for Learning Statistical Concepts – 1.5 hr recording

Facilitators: Beth Chance (Professor of Statistics at California Polytechnic University) and Sophia Georgiakaki (TC3 Math Department Chair)

In this workshop, you will directly experience examples of classroom activities designed to introduce students to various statistical concepts, such as MATH200 or Algebra II. These activities, by Allan Rossman, Jennifer McNally, Beth Chance, Jill VanderStoep, and Soma Roy, were developed as part of an NSF-funded project on Statistical Investigation.

During the session, Beth will lead you through a couple of activities, with instructors playing the role of students. At the end of the session, Sophia will facilitate a discussion about the activities and various ways in which they can be implemented with your students.

To participate, bring your own Internet-connected device to run the Rossman-Chance applets (works with IE8+ and recent versions of Chrome, Safari, and Firefox).

Bridging Classroom Coding with Workforce Skills – 1.5 hr recording

Facilitator: Ken Whitener (TC3 Computer Science Faculty, Technology Dep Chair, Faculty Liaison)

Ken will provide computer science instructors (such as those teaching CSCI or CIS) with the essential knowledge and tools to incorporate key workforce skills into their coding curriculum, with a focus on unit testing, version control with Git, and debugging techniques.

Coding experience is necessary to follow along in this hands-on workshop.

Physics in 3, 2, 1! – 1.5 hr recording

Facilitator: Fred Farah (TC3 Physics Faculty and Liaison)

This workshop is an opportunity for everyone to share some of what they are most proud of about their physics courses. Let's celebrate all the wonderful things happening in our physics courses and come away with new things to try in the coming year!

Please come prepared to share:

- **3** of your best practices you use in teaching your college level physics courses;
- **2** of your favorite Internet resources;
- **1** demonstration

So that everyone comes away with new ideas, [please upload items to this shared Google folder](#).

Anatomy & Physiology Discussion – 0.5 hr recording

Facilitator: Kelly Murray (TC3 Biology Faculty and Liaison)

This will be an informal/roundtable discussion for Anatomy & Physiology instructors, as well as others who cover A&P topics in their courses. The goal is to ensure consistency from class to class in both content and rigor, and for everyone to have a discussion around best teaching practices. What works? What doesn't?

You are strongly encouraged to bring examples of exams, slides, or any other course materials to share/discuss. [You can upload materials to our shared Google folder](#).

Restorative Practices for Educators – 1 hr recording

Facilitator: Dr. Michele Whitecraft (TC3 Chemistry Faculty and Liaison)

According to research out of Boston University (2021), depression rates in the United States tripled when the pandemic hit. Now, they are even worse.

In this session, educators will share their experiences in their respective areas and discuss restorative practices that can help foster responsibility, healing and hope in schools.

Please bring any anecdotal evidence of the following: What signs and symptoms have you seen in education? Are the number of referrals in your schools going up? Has the tone and frequency of emails changed?

Graphic Design Makerspace – Part 1

Facilitators: Michelle LaMorte (TC3 Art Paraprofessional) and Christine Shanks (TC3 Art Department Chair and Liaison)

By popular request, this “maker day” is especially for ART 117 faculty. In this workshop in our design studio (room 141), instructors will engage with the hardware and maker possibilities of our graphic design program.

This is a **two-part** hands-on workshop! Due to the nature of this workshop, it will not be recorded.

Bring raster and vector files to make things! ☺

AFTERNOON BREAKOUT OPTIONS

Use of Artificial Intelligence in Math Classes – 1.5 hr recording

Facilitators: Danielle Bethoney and Margaret DeGaetano (TC3 Math Faculty and Liaisons)

Are you using Artificial Intelligence (AI) programs to support your classes? What are your policies around the use of AI?

Danielle and Margaret will facilitate a discussion about the use of AI in math classes, including ways to use it in a positive way as instructors and with students, and how you may detect when students are using it ("It ain't easy"). One goal is to develop a math department policy around the use of AI.

As time allows, we will also discuss the use of calculators in math classes to develop a common understanding of what is appropriate.

If you are not yet familiar with ChatGPT, Photo Math, and similar AI programs, please check them out ahead of time to explore the possibilities and potential problems so we can discuss AI's effect on math teaching and learning. Please bring your laptop to this session.

Technology and Engineering Pathways – 1.5 hr recording

Facilitators: Alex Chernyakov (TC3 Electrical Technology Faculty), Fares Jnaid (TC3 Engineering Faculty), and Sophia Georgiakaki (TC3 Math Faculty and Math Department Chair)

Careers in technology, including both at the technician (2-yr degree) and engineering level, are on the rise in Central New York. Fortunately, TC3 has courses that prepare students for these fields. In this session, you will get an overview of our Applied Science & Technology and Engineering Science degree programs, including course requirements (and what is available in high school), industry partnerships transfer pathways, and microcredentials. We will also tour the new lab spaces at TC3.

Chemistry in 3, 2, 1! – 1.5 hr recording

Facilitator: Dr. Michele Whitecraft (TC3 Chemistry Faculty and Liaison)

There are so many wonderful resources available to teach college chemistry today. In this session, we will share new resources found from American Chemical Society (ACS) online and other Internet resources, as well as “oldies but goodies.”

Please come prepared to share:

- **3** of your best practices you use in teaching your college level chemistry courses;
- **2** of your favorite Internet resources;
- **1** demonstration

So that everyone comes away with new ideas, [please upload items to this shared Google folder](#).

Inclusivity in the Biology and Health Classroom – 1 hr recording

Facilitator(s): Kelly Murray (TC3 Biology Faculty)

The focus of this session will be a candid discussion on fostering an inclusive environment in the Biology classroom. Topics will include the use of gender-neutral language in Biology education, as well as methods to encourage students to gain an understanding of how bias can influence both biological research and the experiences of historically marginalized groups within healthcare settings.

Graphic Design Makerspace – Part 2

Facilitators: Michelle LaMorte (TC3 Art Paraprofessional) and Christine Shanks (TC3 Art Department Chair and Liaison)

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Orientation for New CollegeNow Instructors – 1.5hrs recording from Aug 20, 2024

Facilitator: Victoria Zeppelin (Director of CollegeNow)

All *new* CollegeNow instructors are required to attend a program orientation before teaching their first TC3 course. We will discuss CollegeNow’s benefits for students, our processes, college and curricular resources, and your responsibilities. There will be time to answer your questions.

If you are a new instructor and have not already attended an orientation with Victoria, please attend. Feel free to contact vcz@tompkinscortland.edu to with any questions to get you ready for your courses. The slides from the presentation are within the [Program Orientation folder](#).