

FSCJ'S ACADEMY for
TEACHING and LEARNING
presents the
THIRD ANNUAL

VIRTUAL

Science Symposium

OCTOBER 16, 2020



FSCJ

Florida State College
at Jacksonville

VIRTUAL SYMPOSIUM

We are excited to offer our third annual Virtual Science Symposium! After registering through [eventbrite](#), you can simply attend from any computer. We look forward to seeing you online!

Helpful Tips for Virtual Symposium

- There will be four themed WebEx rooms – Resources, Teaching Methods, Topics of Interest, Environmental.
- Each session and conference links will be available on our [website](#). Simply select the presentation that you want to access.
- Keep in mind that some presentations will be live-streamed while others will be pre-recorded.
- If you experience any technical difficulties during the presentation, simply refresh your browser.

If you have any questions, please reach out to us at academy@fscj.edu.

Vendor Drop In

Pearson Publishing

David Alevy, Pearson

Tools for Active Learning

Brian Kelleher, Morton Publishing

This presentation will include an overview of Morton Publishing's catalog of Lab Manuals, Photographic Atlases and supplemental texts for the Life and Physical Sciences, emphasizing interactivity and visual engagement.

Video Shorts

While You Wait

Holly Wiegreffe, FSCJ

Synchronous Online Teaching

RyanSessions, FSCJ

SCHEDULE-AT-A-GLANCE

Welcome

8:45-8:55 a.m.

Video Conference

Sondra Evans, Academic Dean of Natural Sciences,
College of Liberal Arts and Sciences, FSCJ

Room 1: Resources [Click Here](#)

9-9:30 a.m.

Lights, Cameras, Digital Pen Tablet!

9:45-10:15 a.m.

Using Libguides to Separate Science
from Pseudoscience

10:30-11 a.m.

Beyond Labz: Converting Students from Learning
About Science to Doing Science

11:15-11:45 a.m.

Gamification: Ways to Gamify Learning

Room 2: Teaching Methods [Click Here](#)

9-9:30 a.m.

Meaningful Teacher Professional Development
in a Virtual World

9:45-10:15 a.m.

Online Tool for Solving Chemistry Word Problems

10:30-11 a.m.

Using Canvas to Be More Engaged with
Your Students

11:15-11:45 a.m.

K-12 Trans-Disciplinary Teaching in the Age of Covid

Room 3: Topics of Interest [Click Here](#)

9-9:30 a.m.

If Education Has a Positive Impact on Health, Then
Why is School So Stressful?

9:45-10:15 a.m.

Science Resources for Teachers

10:30-11 a.m.

Time to Put on Your Genes!

11:15-11:45 a.m.

Demochicks: Introducing Girls to Non-Traditional
Careers and Encouraging Community Involvement

Room 4: Environmental [Click Here](#)

9-9:30 a.m.

The Field of Environmental Sciences: Land Trust Alliance

9:45-10:15 a.m.

Teaching Science in Florida

10:30-11 a.m.

Free Digital Educational Materials and
Opportunities from "Urban Ag" at FSCJ

11:15-11:45 a.m.

What Works Best for Providing Environmental
Professional Development When Online is the Only Option

Room 1: Resources Click Here

9-9:30 a.m.

Lights, Cameras, Digital Pen Tablet!

Chris Lee, Professor of Information Technology and Engineering Technology, FSCJ

A teacher's ability to convey knowledge depends on a mastery of the subject, as well as effective delivery of information. Over time, a face-to-face instructor creates a learning environment that complements their teaching style. Online teaching requires the same attention to environmental details. Poor light and sound can be distractions that lead to distortion of information and lack of focus. This presentation will explain some practical ways to enhance synchronous lectures and pre-recorded videos with inexpensive lighting, wireless microphones, additional cameras (other content sources), dual monitors and a digital pen tablet.

9:45-10:15 a.m.

Using Libguides to Separate Science from Pseudoscience

Elisabeth Ball, Faculty Librarian, Library and Learning Commons (LLC), FSCJ

LibGuides are the academic librarian's number one tool for organizing key information and posting it on the internet for faculty and student access. In these times of misinformation and disinformation, LibGuides concerning pseudoscience are extremely important. Participants will see current public guides with links to key sites which help ferret out fake science.

10:30-11 a.m.

Beyond Labz: Converting Students from Learning About Science to Doing Science

Brian Woodfield, Co-founder, Beyond Labz; Professor of Chemistry, Brigham Young University

Beyond Labz provides sophisticated and realistic laboratory simulations for chemistry, organic chemistry, biology and physics education, based on a Science SDK built up over 20 years of research. Our philosophy is that students should be placed in educational environments where they are free to make decisions and experience the resulting consequences. We believe students learn science best by doing real science, and that a combination of real and virtual labs provides students a richer learning experience where they are freed from the constraints of time, safety and costs.

11:15-11:45 a.m.

Gamification: Ways to Gamify Learning

Laricia Baker, Duval County Public Schools

In this presentation, we will discuss how our team created training sessions for our teachers to help them incorporate gamification into learning. We will focus on Escape rooms for one session and Gimkit for the other. We will also talk about other tech tools that we have developed trainings for and others that we are working on: Edpuzzle, flipgrid, quzzlet/quizzlet live and Minecraft.

Additional Presenters: Alexis Papaiani, Inga Pinnix, Angela Reier and Leslie White, Science Specialist team, DCPS

Room 2: Teaching Methods [Click Here](#)

9-9:30 a.m.

Meaningful Teacher Professional Development in a Virtual World

Janet Schnauss, Duval County Public Schools, Elementary Science Specialist Team

In this presentation, we will discuss how our team created and managed our summer professional development in a virtual format. This training is normally face-to-face since we teach science content, learning strategies and lab skills. When we moved to an online learning platform, we were still able to provide meaningful professional development. This included meaningful strategies for teachers who would be returning to brick and mortar schools and for teachers who would be teaching in our virtual platform, Duval Homeroom.

Additional Presenters: Andrea Valdovinos, Kipi Becker, Tomeia Nesbitt and Madeline Twigg, Elementary Science Specialist team, DCPS

9:45-10:15 a.m.

Online Tool for Solving Chemistry Word Problems

John Taylor, Professor of Chemistry, FSCJ

Chemistry word problems may sometimes be difficult. There are several methods for solving chemical word problems. A powerful technique for solving problems is called unit analysis method or unit conversion method, sometimes referred to as “dimensional analysis method” or “factor label method of problem solving.” Unit analysis cannot solve every chemistry word problem, but it is very effective for the problems we encounter in beginning and college chemistry. The presenter will demonstrate his Online Dimensional Analysis Calculator found on its special website: fscj.me/chem1001/dimanalysis/unitanalysisIntro.htm. It contains five step-by-step worked examples plus seven additional word problems showing their setup and solution.

10:30-11 a.m.

Using Canvas to Be More Engaged with Your Students

Brandi Bleak, Assistant Director Educational Technology, FSCJ

Beyond the basic functionalities of Canvas – Assignments, Discussions, Rubrics and Quizzes – there are features that allow you to communicate more effectively, add personality to your course and foster a sense of community within your virtual classroom. This session will review a few of our favorite tools in Canvas that allow instructors to creatively stay in touch with their students and maintain a sense of normal in these unprecedented times!

11:15-11:45 a.m.

K-12 Trans-Disciplinary Teaching in the Age of Covid

Daniel Gammage, Discovery Education

Discovery Education Experience provides engaging high-quality content, ready-to-use digital lessons, creative collaboration tools and practical professional learning resources to give educators everything they need to facilitate instruction and create a lasting educational impact in any learning environment.

Room 3: Topic of Interest Click Here

9-9:30 a.m.

If Education Has a Positive Impact on Health, Then Why is School So Stressful?

Naita Guine, Instructional Program Manager, Adult Education, FSCJ

Studies reveal that adults with higher education attainment levels live longer and healthier lives compared to peers who are less educated. Additionally, morbidity rates of individuals with higher levels of education are significantly lower than those who have not completed high school. Researchers have suggested that American public health depends on improving the education levels of the American public. So, if education is so important and has a positive impact on the health of adults, then why is going to school so stressful? This non-scientific, highly interactive workshop will review some of the data surrounding educational attainment and the positive impact it has on health.

9:45-10:15 a.m.

Science Resources for Teachers

Amy Trujillo, President, Florida Association of Science Teachers (FAST)

Learn about FAST and how it supports educators across the state as well some tips on what resources are available for teaching this fall.

10:30-11 a.m.

Time to Put on Your Genes!

Jonathan Dalton Sweat, UF College of Pharmacy

This presentation will provide a look into how clinical pharmacogenomics plays a role in health decisions for a multitude of disease states. We will explore how some cardiovascular, psychological and chemotherapy agents are affected by genetic variations. In addition, we will dive into the consequences of genetic variation on drug efficacy. We will also discuss how the medications are affected and how to combat therapeutic issues that may result.

11:15-11:45 a.m.

Demochicks: Introducing Girls to Non-Traditional Careers and Encouraging Community Involvement

Robin Thorne, Demochicks-CTI Environmental Corp.

Demochicks uses social media and an online platform to introduce girls to the world of nontraditional careers including STEM, architecture, construction and the trades. Robin uses her experience as the CEO of CTI Environmental, Inc., her chemical engineering background and passion for community to provide meaningful engagements to enlighten girls and empower them to find and pursue their passions. Robin will provide an overview of CTI and the process Demochicks uses to elevate the next generation of students.

Room 4: Environmental [Click Here](#)

9-9:30 a.m.

The Field of Environmental Sciences: Land Trust Alliance

Lillian Dinkins, Tuskegee University Fellow, Conservation Florida

This program will inform listeners on the Scholars of Conservation Leadership program as well as what the Land Trust Alliance is and the work that Conservation Florida does. We will speak on why conservation is important, how it affects plants, animals, humans and our ecosystem. We will also encourage and state ways to get involved in this field and easy ways to get in nature even in your backyard.

9:45-10:15 a.m.

Teaching Science in Florida

Patricia Duncan, Nancy Narvaez-Garcia, Office of STEAM, Standards and Instructional Support, Florida Department of Education

The Office of STEAM at the Florida Department of Education provides quality services and resources to build strong foundations for every Florida student in STEAM to produce the future Florida STEM workforce.

10:30-11 a.m.

Free Digital Educational Materials and Opportunities from “Urban Ag” at FSCJ

Chris Perle, Professor of Biology, FSCJ

“Urban Ag” at FSCJ aims to bring improved understanding and utilization of hydroponic and aquaponic technologies to students, teachers and citizens of Jacksonville and beyond. To support these goals, freely available “digital learning objects” are available to all. Learning objects encompass the design, set up and maintenance of an aquaponic system, background information on the technologies, and the underlying scientific instruction needed to operate and understand them. Many modules are suitable for basic science instruction at the ‘Gen-Ed’ level. Ongoing activities of “Urban Ag” at FSCJ, including the development of a series of virtual workshops, will also be discussed.

11:15-11:45 a.m.

What Works Best for Providing Environmental Professional Development When Online is the Only Option

Janet Schnauss, K-5 Science Specialist, DCPS and Suzette Gagnon, STEM Coordinator, Christ the King Catholic School

Project Learning Tree (PLT) is the environmental education program of the Sustainable Forestry Initiative. This summer, a team of PLT trainers provided summer professional development for K-8 educators on an online platform. This training is normally full of indoor and outdoor activities. Through strong teamwork, creative thinking and practice, we were able to successfully implement the training virtually. Join us as we share some of our strategies and introduce you to what Florida PLT has to offer.



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