



Annual Conference Proceedings

**The Thirty-Third
Annual Conference**
Association of Faculties for the Advancement
of Community College Teaching

Let's Engage

January 12 and 13, 2023

**Held Virtually
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Howard Community College
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AFACCT Conference 2023 Proceedings

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Dr. Rose Mince, Provost and Dean of the Faculty, Carroll Community College

Keynote Address Day #1: January 12, 2023

Dr. Rose Mince is the Provost and Dean of the Faculty at Carroll Community College. Dr. Mince oversees the academic and student support areas of the College as well as marketing, strategic planning, institutional research, and online learning. Rose is the current chair of the Maryland Council of Community College Chief Academic Officers and has been very active in advancing transfer initiatives statewide. She is a national peer reviewer for Excellence in Assessment awards for NILOA.

Dr. Mince began working at Carroll in February 2017. Prior to her position at Carroll, she was the Dean of Instruction for Curriculum and Assessment at the Community College of Baltimore (CCBC). Dr. Mince was responsible for leading CCBC's nationally acclaimed learning outcomes assessment initiatives, their freshman transition programs, and distance learning and instructional technology initiatives. She was also instrumental in helping CCBC foster nationally recognized programs for accelerating student learning and success in Developmental Education and General Education redesign.

Dr. Mince's education background includes a Ph.D. from the University of Maryland, College Park; an M.S. from the University of North Carolina at Greensboro; and a B.S. from the University of Maryland, College Park. She is also a well-known presenter and a published author of several articles in academic journals.

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Dr. Megan Myers, Professor of History, Howard Community College

Keynote Address Day #2: January 13, 2023

Dr. Megan Myers joined Howard Community College about a decade ago as a history faculty member in the division of Social Sciences and Teacher Education. She then took on the position of the Director of eLearning, overseeing the expansion of that area to serve an increased number of students, faculty, and staff in the delivery of online courses, programs, and technology-rich face-to-face courses. Dr. Myers has worked with HCC leadership, her team, and faculty to guide the institution through the expansion of remote and online offerings and services through the COVID-19 pandemic. In her years in eLearning, she has focused on online quality assurance, bringing easy-to-understand and actionable data to faculty, and issues of equity in the access to and delivery of education. In her current role as the Interim Associate Vice President for Faculty Development and Learning Innovation, she collaborates with her team and campus leadership to provide systems, resources, and professional development experiences that promote equitable, accessible, and inclusive learner-centered practices. With her teams in the library and the Center for Learning Excellence, Dr. Myers partners with faculty across campus to promote a culture of innovation and lead initiatives that transform learning in and out of the classroom. She holds a bachelor's degree in history from Vanderbilt University and a master's degree and Ph.D. in history from Boston College.

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Be Engaged, Be Very Engaged

Session 2.3 Thursday, January 12

Professor Adams and Professor Surasky presented ways to get struggling to students to participate in class. In the presentation, Professor Adams demonstrated how she used Desmos in her Statistics classroom to increase student engagement. She used Desmos (<https://teacher.desmos.com/>) in her classes for students to work on examples, share work anonymously, and let students share their thinking with each other. Desmos can also presents new material for an instructor and the teacher dashboard feature gives the instructor a window into students thinking in real time. Professor Adams presented how she used Google Jamboard to allow students to share homework questions anonymously while in class. She has found that some students were more willing to share questions they had on the material when they did not have to raise their hand. The Jamboard acts as a real-time discussion/chat during a face-to-face class. Professor Surasky discussed how learning student names and using them often, allowing time for introductions at the beginning of the semester, and attending athletic events or extracurricular activities increased the sense of community within the classroom. She presented ways to have students create data ownership by using real world, relevant data, or allow students to collect and use their own data for class examples.

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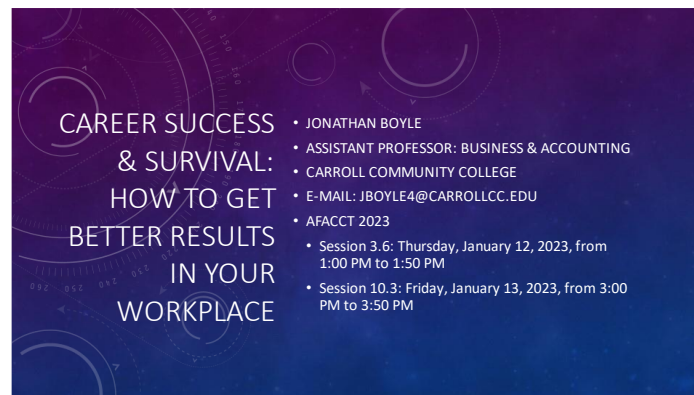
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Career Success & Survival: How to Get Better Results in Your Workplace

Sessions 3.6 and 10.3

Everyone wants to strive to be their best in the higher education institutions where they are employed. This presentation focused on best practices and tools, backed by research, to help people enhance their own career success at their higher education institutions. The conceptual framework used for this presentation is from Clinton Longenecker's *The Successful Career Survival Guide* (2017). In this book, Longenecker identifies twelve career success imperatives that are broken down into four challenges. Each challenge and each career success imperative has been shown and described in this presentation. Moreover, examples of the specific activities required to accomplish each imperative have been discussed with the goal that people know what must be accomplished to deliver value-added results in the higher education institutions where they work and enhance their own career success and survival.

- Learning Objective 1: Identify and explain career success and survival essentials.
- Learning Objective 2: Apply specific actions in your work to enhance career success and survival.



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Amy Cedrone. Assistant Professor of Philosophy and Religion, Harford Community College: acedrone@harford.edu

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QM8 Plus: A User-Friendly Faculty Tool for Improving Online Course Accessibility for All Learners

Asynchronous Session 10

During the 2021 Maryland Online Leadership Institute (MOLLI) group project, we saw a need to develop a tool to provide clear guidelines, useful examples, and simple instructions for improving accessibility and DEIB considerations in online courses. This tool has application for all faculty with an online course presence and for all teaching modalities. It identifies DEIB considerations, while making accessibility easier to achieve. This tool is a work-in-progress. What is currently complete will be presented as a ready-to-use item or model. The point of this session is to introduce our project and the tool to colleagues, and gather feedback and input from the population who would use this tool.



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Ready, set, research: Engage your students with ready to go authentic collaborative research experiences in biology

Session 9.3

Collaborative CUREs are Course-based Undergraduate Research Experiences implemented at multiple institutions that all contribute to a common dataset for open-ended research questions. In this session, participants learned about two collaborative CUREs in ecology and evolution, both of which can be implemented at low or no cost, and have been successfully implemented in community college courses for both majors and non-majors. BCEENET (Biological Collections in Ecology and Evolution Network) supports educator training and implementation of CUREs using digitized natural history collections data. Squirrel-NET supports a series of field-based CUREs that help students build skills applicable to ecology and wildlife careers. During this session, participants:

- Identified ready-to-use biology CUREs with support from national faculty networks
- Discussed strategies to modify and incorporate a CURE into an existing syllabus
- Connected with faculty implementing CUREs to share ideas and best practices for future collaborations



Ready, set, research: Engage your students with ready to go
authentic collaborative research experiences in biology

Session Moderator: Carly N. Jordan, The George Washington University, BCEENET

BCEENET Panelist: Janice L. Krumm, Widener University

BCEENET Panelist: Kristen S. Genet, Anoka -Ramsey Community College

Squirrel-Net Panelist: Patrice K. Connors, Colorado Mesa University

Squirrel-Net Panelist: Susan Ramones, American River College

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*Awareness, flexibility and growth in the post-pandemic classroom:
A shared experience*

Asynchronous Session 9

The last two years have been a period marked by profound challenges, learning and continuous adaptation for both students and instructors. Our presentation reflects on the post-pandemic classroom experience in a Macroeconomics class, using a four-stage model that describes a process of crisis, awareness, flexibility and growth. Engagement has been a critical component in this process. We also present evidence that this learning path has been similar across higher education institutions and cultures. The two main objectives of this presentation are: a) to highlight the opportunities for greater engagement and flexibility in a remote Economics class; and b) to discuss how this learning process has been taking place in different institutional settings.

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***Awareness, flexibility and growth
in the post-pandemic classroom:
A shared experience***

Eugenia Perona & Mariela Cuttica



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Creating Adaptable Chemistry Labs Using an Herbal Tea pH Indicator

Asynchronous Session 3

The presentation introduced the use of Butterfly Pea Flower tea (BPFT) as a natural pH indicator to teach chemistry concepts and skills through lab activities. One of the advantages of using natural indicators like BPFT is that they are readily available, affordable, and safe to handle. Using natural indicators also allows for exploring the chemical composition and properties of plant extracts, which can inspire students to learn more about botanical sciences and natural products chemistry.

The proposed lab activities involving BPFT are designed to teach various chemistry concepts and skills, such as acid-base reactions, spectrophotometry, chromatography, and chemical analysis. By using BPFT as a pH indicator, students can visualize the changes in color and intensity of the tea as it reacts with different acids or bases, which helps them understand the principles of acid-base titrations and pH measurement. The experiments involving UV-Vis lambda max and Beer-Lambert's Law provide an opportunity to apply mathematical concepts such as absorbance and concentration, which are fundamental in quantitative analysis. The IR analysis and GC-based separation allow students to explore the chemical structure and purity of the BPFT extract, which are essential skills for organic chemistry and instrumental analysis.

Overall, the use of BPFT as a natural pH indicator provides a versatile and engaging approach to teaching chemistry concepts and skills. By incorporating a range of lab techniques and concepts, the proposed activities can accommodate different skill levels and interests, encouraging student engagement and understanding.



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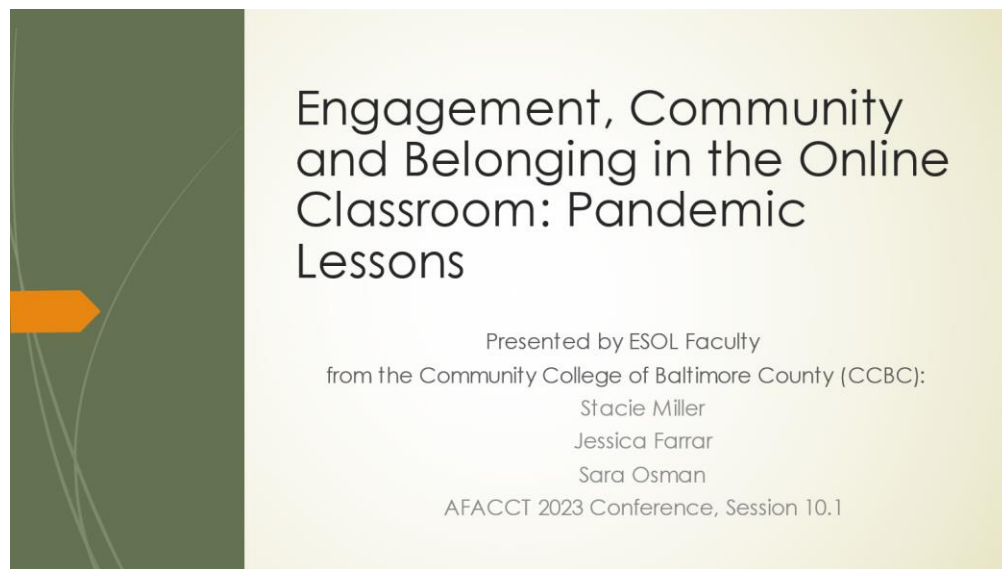
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Engagement, Community and Belonging in the Online Classroom: Pandemic Lessons

Session 10.1

At AFACCT in 2021, we gave a presentation on building online community during a time of social distancing. In 2023, we shared post-pandemic lessons about classroom community, belonging, and engagement, and discussed how these concepts can be applied to the online classroom. After reviewing definitions of these terms in recent literature, we explored the connection between these concepts and student success, the role that learning communities can play, and the role of community in our own lives. We then examined practical techniques for faculty to create community in the online classroom, including Jigsaw Readings, Hall of Fame, and Discussion Boards. This session's objectives included 1) discussing the connection between student success and classroom engagement; and 2) applying and sharing techniques to build community in virtual classrooms.



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Dr. Brent Ferguson. College of Southern Maryland: baferguson@csmd.edu

An Introduction to the Buffet Style of Grading

Sessions 5.4 and 8.4

The buffet style of grading gives students a choice and plays up to their strengths. Each assignment has a different major in mind while still relating to the subject content. This presentation's main objective was to explain how shifting to a buffet style grading system can and will help their students engage with the material, provided examples of buffet assignments in my courses and other courses, and showed the different types of buffets. The overall objective was to allow students a set amount of choices and having work available utilizing the student's strengths. The presenter provided sources relating to Universal Design of Learning. This led to a discussion on the syllabus, and how it must be clear and flexible. The presentation ends with examples of the various assignments a student might find on the buffet



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Building a Science Department DEIA Committee: A second year reflection

Session 1.6

The presenters shared experiences and accomplishments after one year of establishing an Inclusion, Diversity, Equity and Anti-racism (IDEA) committee, a faculty-driven initiative started at Anne Arundel Community College (Arnold, MD). This workshop guided participants through the initial steps of assessing their departmental climate and establishing a committee of peers. Participants were provided with steps to navigate the process of creating an IDEA committee and learned about accomplishments and challenges encountered.

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Daniel Izume. Assistant Professor, Business; Coordinator of Business Administration and Management Programs; Baltimore City Community College: dizume@bccc.edu

Using Rubrics and Checklists to Enhance Student Learning

Asynchronous Session 4

The main objective of this asynchronous session was to discuss the effectiveness of rubrics and checklists in improving the learning experience of students and making the grading process fair and consistent. Grading is a complex and subjective task, but the use of rubrics and checklists can aid educators in evaluating student work based on specific criteria and levels of accomplishment, while also communicating the essential components of an assignment to students. Participants were introduced to the benefits of incorporating these grading tools, such as providing valuable feedback, setting clear expectations, ensuring grading consistency, and supporting students in developing their learning skills.


It is crucial to maintain consistency and fairness in grading to ensure students receive an accurate assessment of their academic performance. This session emphasized the importance of rubrics and checklists in achieving these goals. Common misconceptions and challenges related to the use of these grading tools were also addressed, and recommendations were provided to overcome them. Rubrics and checklists can play a vital role in assisting students in improving their academic outcomes. By establishing clear guidelines, promoting self-evaluation, providing constructive feedback, and ensuring fairness and transparency, these tools can significantly contribute to students' academic success.

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Using Rubrics and Checklists to Enhance Student Learning

Agenda

- Meet the presenter - Professor Daniel Izume
- Topic Description and Objectives
- What is a rubric 
- Common Misconceptions
- Importance of Rubrics
- Analyzing Rubrics
- Using Checklists
- Presentation Resources
- Key takeaways



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Dianne Kaschak. Health Quality Innovators: dkaschak@hqi.solutions

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The Maryland Project Firstline Infection Control Training Program

Sessions: Poster 4 and 7.8

Project Firstline is a free, infection control training program developed by the CDC and being delivered to frontline healthcare workers by the Maryland Department of Health. We are particularly interested in reaching health sciences students to supplement their training before they enter the workforce.

MD Project Firstline can provide SCORM files to upload to any learning management system or can facilitate group training sessions in-person or virtually. Content includes COVID-19 specific information, such as how it is spread and the basics of the virus, but also includes general infection prevention content.



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Dr. Elizabeth Lugosi. Montgomery College: erzsebet.lugosi@montgomerycollege.edu

Engage to Enhance Understanding and Success

Asynchronous Session 6

In the fall 2023 semester, additional pedagogical practices were implemented to the active learning strategies (interactive presentation style, group-work with discussion and feedback, volunteer presentations of solutions by groups, raising students' learning interest towards specific topics, involving students in mathematical explorations, experiments, and projects, and continuous motivation and engagement of students) to enhance student understanding and success in a calculus class.

Four additional pedagogical methods were introduced (increasing baseline knowledge, using critical thinking, scaffolding in problem-solving, and increasing collaboration between students) to provide opportunities for students to engage with one another to deepen their knowledge of principles and practices and encourage students to use critical thinking and scaffolding in problem-solving.

Lessening students' math anxiety, increasing their appreciation of mathematics and a positive learning environment, improving their general skills, and experiencing the benefits of collaboration with fellow students and with a professor were also among the goals to be achieved.

To measure the effectiveness of these additional strategies, at the end of the semester, students' opinions were asked in a survey about skill improvement, collaboration in problem-solving, relationship with the professor, learning environment, appreciation towards mathematics, and math anxiety. Their answers demonstrated that most of the students had positive experiences.

Student engagement is crucial in mathematics education, and it can be increased by thoughtfully implementing appropriate pedagogical strategies.



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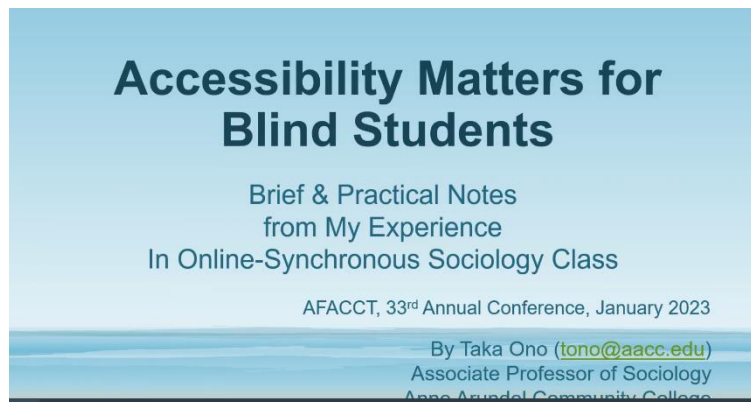
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Accessibility Matters for Blind Students: Some Practical Tips

Asynchronous Session 8

This 22- minute video presented several concrete ideas and practical tips about accessibility that instructors must consider when they have a blind or low-vision student(s), based on his own experience in an online synchronous class in 2021. Most of the presentation dealt with issues about videos and alternative texts for embedded images, such as graphs, tables, figures, and math equations, as well as what instructors can do. It concluded with a handful of resources to help instructors learn further and check accessibility themselves.



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Dr. Edward Orlando. Associate Professor; Coordinator of Anatomy and Physiology II and Basic Anatomy and Physiology, Howard Community College: eorlando@howardcc.edu

Improving Upon an already Good – No Excellent – A&P Lab

Poster Session 3

One segment of my professor promotion project includes a modernization of the lab component of our Anatomy and Physiology II course at Howard Community College. As the new Coordinator, here is the challenge: How does one improve upon what appeared to be a good - no excellent – lab? The goal of this poster is to lay out the methodology and to reveal what I have learned following this approach by the Conference. I am hopeful that some of you who have completed a similar journey, or maybe considering one, will get in touch with your comments and suggestions.

Improving upon an Already Good – no, Excellent – Anatomy and Physiology Lab

Ed Orlando, Ph.D.
Course Coordinator, Human A&P-II



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Dr. Hannah Pie. Associate Professor; Howard Community College: hpie@howardcc.edu.

Integrating Quantitative Skills into Biology Classes

Sessions 3.5 and 7.3

As a response to calls for changes in Biology education to include more applied math skills, teams of instructors from University of Maryland, Baltimore County (UMBC), Howard Community College (HCC), Montgomery College (MC), and Community College of Baltimore County (CCBC) through the National Science Foundation Improving Undergraduate STEM Education (NSF IUSE) project designed novel group work modules for four introductory Biology courses that incorporate the application of mathematical skills in biological contexts. The modules focused on helping student improve upon quantitative competencies like demonstrating quantitative numeracy, interpreting data/graphs, demonstrating proficiency in statistical analyses, using mathematical models in biological systems, applying logic to problem solving, and using quantitative language to describe biological phenomena. Each module included pre- and post-assessment questions that students take to assess the success of the module in helping students learn the quantitative competencies covered. This presentation focused on the design process, implementation, and success of the quantitative modules implemented in Cellular Biology courses. The presentation also discussed lessons learned following the piloting implementation of the modules and how portions of the modules and/or assessment questions were subsequently adjusted to improve student success

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Prof. Padmavathi Tangirala, Professor of Biology, Montgomery College, Germantown Campus, padmavathi.tangirala@montgomerycollege.edu

Engaging Across Institutions and Disciplines to Build Quantitative Reasoning in Introductory Biology

Session 5.6

This presentation highlighted interdisciplinary and inter-institutional work to incorporate quantitative reasoning (QR) into majors-level Introductory Biology I (Cells & Molecules) as part of the Nexus Institute for Quantitative Biology (NIQB) project (<https://niqb.umbc.edu>). NIQB is an NSF-funded collaboration between Anne Arundel Community College, Community College of Baltimore County, Howard Community College, Montgomery College, and University of Maryland, Baltimore County. The project brings together biology and math faculty, supported by instructional design experts, to build biology curriculum modules that enhance students' QR skills and facilitate successful transfer from two-year to four-year institutions.

Introductory Biology I faculty described development and implementation of QR curriculum modules for the course. After using published curriculum awareness tools to identify biology topics heavily emphasized across all five institutions, they aligned those topics with NIQB project quantitative competencies identified from published work. Breakout sessions provided specific details on the following Introductory Biology I QR modules and the skills they develop.

- Scientific Process: Students explore scientific hypotheses and experimental design. They build skills interpreting graphs, comparing linear and nonlinear relationships, and recognizing correlation vs. causation.
- Osmosis: Students investigate the relationship between solution tonicity and osmosis. They build skills associated with graphing, understanding linear relationships, and calculating rates of change.
- Cellular Respiration & pH: Students determine energy yield, pH changes in mitochondria, and effects of drugs on the electron transport chain. They build skills in applying numerical relationships, interpreting graphs, and using logarithms to calculate pH.
- Cell Cycle & Mitosis: Students determine mitotic phases and calculate mitotic indices to compare normal vs. cancerous tissue. They build skills calculating, interpreting, and applying descriptive statistics (e.g., standard error of the mean).

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The Many Faces of Interaction and Engagement of Students in College Learning Environments

Session: 2.9

The presenter discussed many facets of interaction and student engagement in college learning environments, based on her dissertation research in transactional distance. Transactional distance is a psychological distance that prohibits student engagement. The various facets explored include: student-teacher interaction, student-student interaction, student-content interaction, student-interface interaction, and vicarious interaction.

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