

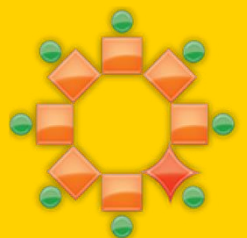
# 2024

## PLTLIS Twelfth Annual Conference: Abstracts for Hybrid Presentations



Hosted by the  
University of Rochester –  
Rochester, New York

Peer-Led  
Team Learning  
International  
Society



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# PRE-CONFERENCE WORKSHOP

Wednesday, May 29, 2024

## *Pre-Conference Workshop*

### **Introduction to the Peer-Led Team Learning Model**

- **M. Cecilia Barone**, University of Rochester
- **Sally Faulkner**, Queen Mary University London
- **Robin Frye**, University of Rochester
- **Hector Leal**, University of Texas Rio Grande Valley
- **Tony Michael**, Queen Mary University London
- **Milka Montes**, University of Texas Permian Basin
- **Sofia Delgado**, Yale University
- **Jessica Gonzalez**, Peer Leader, University of Houston Downtown
- **Christina Hamilton**, Peer Leader, University of Houston Downtown
- **Taylor Newton**, Peer Leader, University of Houston Downtown

**Part 1:** The workshop introduces the experience of working in collaboration with colleagues to solve a problem, facilitated by a trained Peer Leader. The focus of the process of learning is highlighted as well as the critical attributes that students gain. The Peer-Led team Learning model's Six Critical Components are introduced.

**Part 2:** Three components of the PLTL model are introduced, with collaborative exercises that support participants' understanding of each so that they will be able to choose how to apply the concept to implement the program. Faculty roles and responsibilities, recruiting and training Peer Leaders, and the rewards/challenges in implementation are discussed.

**Part 3:** The importance of challenging problems to promote interaction, the issues of integrating peer-led workshops into schedules and physical and virtual spaces, and the attention to issues of assessment for the implementation of PLTL at participants' institutions will be explored through exercises and discussion.



# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

## *Presentation – Implementation and Evaluation of PLTL*

### **Breaking Barriers: PLTL's Role in Equitable Education for Students of All Backgrounds**

- **Sally Faulkner**, Queen Mary University of London
- **Anthony Michael**, Queen Mary University of London

QMUL embarked on its PLTL journey with an initial pilot in the Department of Chemistry in 2021. The results were promising, with a noteworthy 6.26% increase in module averages, culminating in a 67.15% success rate. Particularly striking was the significant improvement observed among BAME\* students, effectively reducing the attainment gap to below 2%. Buoyed by this success, the PLTL pilot expanded its horizons, encompassing additional disciplines in the ensuing academic year. The current project sets its sights on unravelling the impact of PLTL on the continuation and progression rates of students hailing from low socioeconomic backgrounds. We use data on student demographics, such as gender, ethnicity and disclosed disability. The project aims to paint a holistic picture of how PLTL permeates through the student experience, bolstering their confidence, sense of belonging, and ultimately, their academic success.

\* In the context of our work, "BAME" refers to Black, Asian, and Minority Ethnic groups, commonly used in the UK to encompass diverse ethnic backgrounds.

## *Presentation – Implementation and Evaluation of PLTL*

### **Comparative Analysis of Embedded and Self-Selected PLTL Sessions: Assessing Traditional Model Adherence Across Diverse Settings**

- **Monica Franco**, University of Texas at Arlington
- **Catherine Unite**, University of Texas at Arlington

Peer-Led Team Learning (PLTL) has emerged as a promising pedagogical approach for promoting collaborative learning and enhancing student engagement in various educational contexts. The University of Texas at Arlington (UTA) implemented PLTL in fall 2020 and currently supports twelve STEM gateway courses. In fall 2023, a pilot was introduced to embed PLTL within first year Chemistry Labs. The objective was to evaluate whether the conventional PLTL model remains consistent despite differences in settings, student enrollment, and the quantity of PLTL Leaders overseeing the sessions. An examination of the initial findings will be presented to provide a comprehensive understanding of the implementation and impact of embedded PLTL in comparison to the traditional model of self-selected PLTL sessions. Key factors such as session frequency, duration, and format, as well as the role of PLTL leaders in facilitating discussions and providing support, are examined to determine their influence on student learning experiences.

# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

## *Workshop – Peer Leader Preparation*

### **Program Structures That Optimize Workplace Skills Development**

- **Jennifer Lundmark**, California State University, Sacramento
- **Julianna Davison**, California State University, Sacramento
- **Victoria Mosley**, California State University, Sacramento
- **Emma Taylor**, California State University, Sacramento

PLTL leaders develop a suite of workplace skills as part of their efforts (we will present new data supporting this claim). This interactive workshop will explore mechanisms by which programs can specifically embed opportunities for growth, spotlight workplace skill development, and assist student leaders in translating their skills to resumes, interviews, and applications for graduate and professional programs.

## *Workshop – The Peer Leader's Perspective: Peer Leaders' Contributions & Professional Development*

### **An Introduction to Phylogenetics: Facilitation Strategies to Assist in Student Learning of Complex Biology Topics**

- **Erin O'Brien**, Ohio State University
- **Ethan Leach**, Ohio State University
- **Makenna Barcklay**, Ohio State University
- **Calvin Zhang**, Ohio State University
- **Madeline French**, Ohio State University

In response to the growing need for innovative pedagogical approaches at The Ohio State University, the Center of Life Sciences Education (CLSE) has developed PLTL workshops for the introductory biology courses aimed at enhancing student engagement, development of metacognitive skills, and comprehension of foundational biological concepts. One example is a workshop designed to introduce students to interpreting phylogenetic trees. This model workshop leverages active learning strategies by emphasizing collaborative problem-solving and knowledge sharing among peers. The peer leaders presenting this workshop will showcase some of the facilitation strategies they use with their own students. During this interactive session, participants will engage in portions of the phylogenetics workshop by working in groups to practice using critical thinking skills and the steps of metacognition. Ultimately, this session will serve as an example of the application of key PLTL principles to a biological concept.

# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

## *Presentation – Implementation and Evaluation of PLTL*

### **Institutionalizing Sustainable Peer-Led Team Learning for Fostering Academic Excellence in a University in the Caribbean**

- **Novelette Sadler-McKnight**, The University of the West Indies, Mona

Our strategy to breathe new life into our ailing Peer-Led Team Learning (PLTL) program involves integrating a credited course for Peer Leaders, cultivating sustainable peer mentorship and academic collaboration at our Caribbean university. This presentation outlines the implementation of this revitalized PLTL program, emphasizing the credited course as a pivotal element. By offering structured credits to Peer Leaders, we aim to acknowledge their invaluable contributions, develop leadership skills, and enhance collaborative efforts, fostering a transformative academic environment.

This presentation will detail our sustainability strategy, credited course design, assessment methods, and broader implications for PLTL initiatives in higher education, envisioning its potential to inspire similar endeavors across the Caribbean.

## *Presentation – Implementation and Evaluation of PLTL*

### **Workshops are Not Just for the Needy: Mandatory vs. Optional Workshops**

- **Sophia Borrego**, University of Texas at El Paso
- **Asher Min**, University of Texas at El Paso
- **James Becvar**, University of Texas at El Paso
- **Geoffrey Saupe**, University of Texas at El Paso

Students often don't know how to ask for help or are too embarrassed to go seek help. They may not even know that they need help or would benefit their learning from reinforcement. In today's world, students feel encouraged to be independent and to help themselves: to look up the answer. This discourages critical thinking and deep learning. Optional workshops self-select only a subset of students, while leaving out the rest who could also benefit. Workshops promote the value of fear-free student-peer interactions, the value of communicating and overcoming your doubts, the value of skills reinforcement, the value of amusement while working hard to learn, and the value of helping yourself by helping others. Workshops help students create safe, stable environments that foster student confidence and helps them become comfortable asking questions. This environment forces all students to build a community to help them not only in the associated class, but also classes further on in their academic careers.

# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

## *Presentation – Implementation and Evaluation of PLTL*

### **How Do You Know If Your Program Is Working?**

- **Corey Shanbrom**, California State University, Sacramento

PLTL programs in which students opt in must confront a murky reality when analyzing program impact: maybe the students who opted in would have performed better anyway, or perhaps the program simply attracts the strongest students. Is there a reasonable way to compare the performance of students who chose to utilize PLTL with those who didn't? One possible answer is a statistical method called Propensity Score Matching. We will explain our use of this technique in assessing the success of PLTL at a large, urban, regional university. No statistical background is necessary to learn about this important analytical tool.

## *Presentation – Implementation and Evaluation of PLTL*

### **Rebuilding Year: Lessons Learned by a New Team in a Long-Established Program**

- **Andrew Collings**, Washington University in St. Louis

Between June 2022 and May 2023, the PLTL program at Washington University in St. Louis witnessed the departure of all four of its departmental program managers along with the Learning Center's director – not just a significant loss of personnel but, even more critically, a sweeping reduction of institutional memory. This paper details how the remaining PLTL partners at Wash U sought to address this unprecedented turnover of people and know-how in terms of both short-term stopgaps and longer-term changes to processes, as well as through the rapid onboarding of new teammates. It also reflects on best practices for 'training the trainers' and approaching staffing challenges as opportunities to re-evaluate existing program structures and practices.

# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

## *Workshop – Peer Leader Preparation*

### **The "Team Learning in Action" Project: A Peer Leader Training Resource for Inclusive and Engaged PLTL Workshops**

- **Maria Cecilia Barone**, University of Rochester
- **Joseph Dinnocenzo**, University of Rochester
- **Madison Burt**, University of Rochester
- **Frye, Robin**, University of Rochester
- **Nicholas Hammond**, University of Rochester
- **Kyle Trenshaw**, University of Rochester
- **Jihan Ayes**, University of Rochester
- **James Becvar**, University of Texas at El Paso
- **Georgina Bugarini**, University of Texas at El Paso
- **Paulina Trevino**, University of Texas at El Paso

Educational research and PLTL practice suggest that students' active participation is essential for successful Peer-Led Team Learning groups. The Team Learning in Action (TLiA) project aims at equipping peer leaders with tools to identify, examine, and address common barriers to student participation in group discussion. TLiA uses a combination of videos, assignments, and classroom activities to troubleshoot common student participation issues in PLTL Workshops presented through the perspective of students with a variety of backgrounds and needs. In this interactive workshop, participants will experience select TLiA activities, learn about training outcomes at our institutions, discuss how TLiA lesson plans could be adapted to their specific peer leader training formats/needs, and explore training resources on the TLiA website. Conference attendees involved in the training of peer leaders may particularly benefit from this session.

This project is funded by the National Science Foundation, through the IUSE (Improving Undergraduate STEM Education) program.



# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

## *Workshop – The Peer Leader’s Perspective: Peer Leaders’ Contributions & Professional Development*

### **Importance of Understanding Your Students’ Body Language**

- **Ashleigh Min**, University of Texas at El Paso
- **Nadia Ponce**, University of Texas at El Paso
- **Asher Min**, University of Texas at El Paso
- **James Becvar**, University of Texas at El Paso
- **Geoffrey Saupe**, University of Texas at El Paso

The ability to understand a student's body language and act on this interpretation is crucial for Peer Leaders. Students learn differently and comprehend information at different paces. When students have difficulty understanding a concept, they often feel embarrassed or hesitant to ask questions. By observing a student's body language, a Peer Leader can recognize a student's confusion and respond promptly. This enables Peer Leaders to be more proactive and take action before a student gets lost or loses confidence. Many concepts in chemistry are interlinked, and therefore a domino effect is created when a student gets lost or confused. By observing body language, actions such as changing the pace of the workshop, using different learning resources, and asking or answering more questions can be done quickly, before students get too confused. By paying attention to body language, greater engagement and a positive overall attitude towards the course can be achieved.

## *Presentation – The Peer Leader’s Perspective: Peer Leaders’ Contributions & Professional Development*

### **The Neuroplasticity of Workshop Networking**

- **Angelina Kang**, University of Texas at El Paso
- **Paulina Luna**, University of Texas at El Paso
- **James Becvar**, University of Texas at El Paso

As Peer Leaders (PLs) in first semester general chemistry at UTEP, we facilitate learning and communication between professors and students as well as among the students in workshops. Facilitation encourages communication, allows the networking practice for every student, and is a skill that can be built and expanded like a neural network. Is knowledge the only thing a student can take from their college career? Networking is just as crucial as studying; it's a versatile skill that can be constantly improved and never taken away. PLs challenge the pre-conception that students are accustomed to just trying to get by, struggling to study independently, and never asking anyone else for help. We promote the first steps of networking by pushing student boundaries to ask questions, to create connections with their peers, to take the dive, overcome their shyness, and work within teams. The surveys we are taking address these conclusions.

# PRESENTATIONS & WORKSHOPS

Thursday, May 30, 2024

*Presentation – The Peer Leader’s Perspective: Peer Leaders’ Contributions & Professional Development*

**Horizontal Mentorship: The Impact of Peers on the Future**

- **Kista Franco**, University of Texas Permian Basin
- **Robert Funderburg**, University of Texas Permian Basin

Mentorship is traditionally perceived as a hierarchical relationship; however, mentorship can also occur in dynamics where individuals are instead peers. Mentorship between peers leads to a collaborative learning experience, where knowledge, skills, and passion are shared more freely. These relationships ultimately lead to a mutually beneficial future, where both roles reciprocate growth in each other. Peer leading at UTPB has made a huge impact on the professional development of the peer leaders. The collaboration of both senior and new peer leaders is what promotes the growth in peer leaders. In this work, we will present evidence of the transformative relationships arising from the Peer-Led Team Learning Program at UT Permian Basin.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Presentation – The Peer Leader’s Perspective: Peer Leaders’ Contributions & Professional Development*

### **How Creating Explorations for Workshops Benefits Peer Leaders**

- **Anthony Aragon**, University of Texas at El Paso
- **Asher Min**, University of Texas at El Paso
- **Christina Valtierra**, University of Texas at El Paso
- **Christopher Trejo**, University of Texas at El Paso
- **James Becvar**, University of Texas at El Paso
- **Geoffrey Saupe**, University of Texas at El Paso

Explorations are activities for workshop that typically use real chemistry to engender curiosity. Through our experience as Explorations managers for our peer leading program, we found that the creative aspect of explorations for workshop can benefit the Peer Leaders (PLs) just as much as the students. However, knowledge is only a part of this equation, being able to communicate this knowledge effectively is even more important. When doing Explorations, PLs find themselves creating metaphors, examples, and analogies that can help students understand concepts. This process is a skill, and all skills require practice. Students are not naturally good at giving feedback. So when PLs try to create a great example for a complicated concept, we gain a priceless piece of experience. That is, we are forced to enter a student’s perspective, and ask: Would this be a good vehicle for communicating these ideas? We will elaborate on these skills.

## *Presentation – Peer Leader Preparation*

### **Using the Scholarship of Teaching and Learning to Inform Peer Leaders’ Practice**

- **M. Cecilia Barone**, University of Rochester
- **Kyle Trenshaw**, University of Rochester
- **Gulsinam Akhmadzhanova**, University of Rochester
- **Maveline Nguyen**, University of Rochester
- **Franklin Troyer**, University of Rochester

The Scholarship of Teaching and Learning (SoTL) provides a framework to systematically improve teaching and learning in higher education, including peer leading and learning in PLTL Workshops. At our institution, all first-time peer leaders (PLs) engage in a SoTL experience by completing a semester-long project that is part of a required credit-bearing course on pedagogy, leadership, and teamwork. In this project PLs are asked to identify an aspect of the Workshop experience that they can improve using PLTL best practices, use scholarly literature to refine their topic, and create and share an original product based on their topic that can inform PLs’ work. In this presentation, instructors will share the overall framework used to guide PLs through SoTL, including examples of specific assignments used to scaffold the SoTL experience. PLs will share examples of completed project assignments, and how they have used their SoTL work to inform their practice.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Presentation – Implementation and Evaluation of PLTL*

### **Evaluating Student Perceptions of Peer-led Team Learning (PLTL) After Integration into Introductory Biology Courses**

- **Erin O'Brien**, The Ohio State University
- **Makenna Barcklay**, Ohio State University
- **Amy Kulesza**, Ohio State University

At the Ohio State University, students can enroll in two introductory biology courses with PLTL. Prior to Autumn 2022, PLTL students were required to enroll in both the 4-credit biology course and a 1-credit PLTL course. Beginning Autumn 2022, the PLTL courses were transformed into a 5-credit, all-in-one model. The goals of this transformation were to improve (1) student recognition that PLTL was part of the course, (2) communication about PLTL within the biology course, and (3) student perceptions of the benefits of PLTL. To assess whether we have met our expected goals, we surveyed PLTL students from before and after this transformation. Students who were enrolled in at least one of the biology PLTL courses from Spring 2021 to Autumn 2023 were asked to complete a 30-item survey aligned to the goals. We will discuss the Biology PLTL program and share the results from this study.

## *Workshop - Implementation and Evaluation of PLTL*

### **Practical and Inclusive Techniques for Student Group Sorting**

- **Matthew Kummer**, Washington University in St. Louis

There are as many factors to consider when assembling functional, inclusive, and engaged PLTL groups as there are unique aspects of each participant. While the process of sorting a list of interested students into a series of groups can be more or less daunting depending on the scale of the program, this workshop will seek to provide insights into one such operation. In the General Chemistry program at Washington University in St. Louis, about 250 students are sorted into about 35 PLTL groups, and some of the practical logistics behind optimizing this sorting process will be shared. The factors which we have identified as important to promote student involvement, retention in the program, and investment in the PLTL philosophy will be discussed. In this exercise, we hope to continue to improve our own sorting method through the exchange of best practices.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Presentation – The Peer Leader's Perspective: Peer Leaders' Contributions & Professional Development*

### **Stems From Here**

- **Xuke (Christina) Wang**, University of Rochester

Martha Chase Club (MCC) is a PLTL Workshop of BIOL 110 (Principles of Biology I) where we aim to honor Martha Chase, an overlooked woman scientist who worked at the University of Rochester. MCC meets once a week and delves into Chase's time here by compiling historical documents archived at the library, hosting panel discussions, composing a research paper, and erecting a plaque. With the implementation of PLTL informed by multiple teaching strategies from James Lang's book *Small Teaching*, MCC engages students in the endeavor to not only highlight Chase's contributions but also further our interest in advocating for underrepresented groups in science. During this special Workshop, I lead my peers in their first college biology class through a collaborative experience of a novel perspective on science and science history. This presentation will discuss that experience and implications for other PLTL Workshops in the future.

## *Presentation – Peer Leader Preparation*

### **Values in Practice: Scenario-Based Learning for Academic Honesty Training for Peer Educators**

- **Emma Rarich**, University of Rochester

This interactive presentation invites participants to engage in scenario-based learning as a model for academic integrity discussions with peer educators in PLTL training. Through scenarios, we will explore fundamental purposes and core values of peer educators and learners, laying a foundation for how educators can better understand and respond to academic integrity concerns when they arise in peer education contexts, such as PLTL workshops. Launching from the knowledge and research of Dr. Mary Gentile in her 2010 book, *Giving Voice to Values*, we will examine what peer educators can do when faced with challenges to institutional and core values, among other pressures, that could manifest during peer education sessions. Participants will leave with clearer ideas and a training framework to support knowing, communicating, and thinking about values in peer education and how values can be a useful tool for helping PLTL educators navigate decision-making around academic integrity concerns and more.



# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Workshop – Peer Leader Preparation*

### **Cultivating Emotional Vulnerability and Community in PLTL**

- **Vincent Pigno**, California State University, Sacramento
- **Navid Akhavan**, California State University, Sacramento
- **Jaecanna Hill**, California State University, Sacramento
- **Kevin Salimo**, California State University, Sacramento

PLTL programs serve as more than just campus jobs for the students they employ. Leaders find themselves supporting students through challenges both academic and otherwise. By striving to create a community of support and emotional vulnerability among the PLTL leaders, they are better equipped to do the same for their students. We will engage in activities related to emotions and well-being and explore ways to make PLTL programs a viable third space for leaders and their students.

## *Presentation – Peer Leader Preparation*

### **Sharing Best Practices: Feedback Mechanisms for Peer Leader Development**

- **Riddhishree Badhan**, Washington University in St. Louis
- **Samantha Evanoff**, Washington University in St. Louis
- **Jonathan Fascetti**, Washington University in St. Louis
- **Irene Wang**, Washington University in St. Louis
- **Jack McGuire**, Washington University in St. Louis

At Washington University in St. Louis, the training required of all peer leaders includes enrollment in academic mentoring courses. Several fundamental feedback systems are provided for PLTL Leaders to share their ideas and experiences with each other, including interactive reflection assignments, discussion posts, and peer-to-peer observations. These mechanisms allow peer leaders of every experience level the opportunity to connect with each other, share facilitation experiences, and provide other peer leaders first-hand insights into successful practices. Here, we present the ways in which these methodologies, among others, are instrumental in creating a closer community of PLTL Leaders and a stronger program for the participating students.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

*Presentation – The Peer Leader's Perspective: Peer Leaders' Contributions & Professional Development*

## **Taking Good Notes Leads to Good Learning**

- **Samantha Zepeda**, University of Texas at El Paso
- **Rene Aguilar**, University of Texas at El Paso

Taking good notes during university lectures and PLTL Workshops and then reviewing and improving them afterward promotes a proactive learning strategy for excellent learning. Good note-taking enhances retention by reinforcing memory of the material presented in class. With this, active engagement is promoted, as note-taking requires attentive listening, processing of information, improving comprehension, and critical thinking skills. Additionally, well-organized notes provide a clear overview of content, facilitating easier review and study. Students who take good notes demonstrate better understanding of the material than students who just sit through sessions and hope to memorize concepts. We reviewed the quality of workshop students' notes, consisting of gathered journals from students combined with extensive surveys from lecture and workshop, and correlated them with the exam grades. The results of our survey will be presented, displaying how data can be used to illustrate the positive benefits of good note taking and cognitive repetition.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Presentation – The Peer Leader's Perspective: Peer Leaders' Contributions & Professional Development*

### **Proposing the API (Active Peer Interaction) Index**

- **Aaron Rivas-Simental**, The University of Texas at El Paso
- **Anjolie Miranda**, The University of Texas at El Paso
- **Emily Zamora**, The University of Texas at El Paso
- **James Becvar**, The University of Texas at El Paso
- **Mahesh Narayan**, The University of Texas at El Paso
- **Geoffrey Saupe**, The University of Texas at El Paso

Students today often lack what are referred to as essential soft skills, skills like leadership and communication skills, problem-solving ability, working effectively in teams, developing the entrepreneurial spirit, and social responsibility. The practice of PLTL helps students gain critical thinking skills and the resulting boost in confidence and reflective practice enhances degree completion. However, assessing and measuring soft skill acquisition is challenging. Hence, we propose the Active Peer Interaction Index (API Index). This quantitative measure evaluates students' use of peer interaction to enhance soft skill development like confidence and problem-solving. We propose the API Index as a measure to evaluate impactful workshop participation. For example, scores ranging from 1.0 (minimal improvement) to 5.0 (significant progress) can be recorded through methods such as photograph analysis and weekly surveys. Fostering active learning and peer collaboration equips students with the skills needed for success in becoming professionals.

## *Workshop – Special Interest Topic: Artificial Intelligence*

### **Leveraging AI for Enhanced Productivity: Assisting with Peer-Led Team Learning (PLTL) and Administrative Tasks**

- **Kimshi Hickman**, PLTLIS

In an era of rapid technological advancement, the integration of Artificial Intelligence (AI) has revolutionized various aspects of our lives. This proposal seeks to explore the potential of AI in two critical domains: Peer-Led Team Learning (PLTL) and administrative or operations tasks. By harnessing the power of AI, we aim to streamline processes, improve efficiency, and enhance overall productivity in educational settings and administrative environments. In this conference presentation, you will delve into the specific applications of AI in both PLTL facilitation and administrative tasks. View a demonstration of the effectiveness and impact of AI-driven solutions in these domains. Discuss potential challenges and considerations associated with the integration of AI, including ethical implications, data privacy concerns, and user acceptance.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Workshop – Special Interest Topic: Artificial Intelligence*

### **Assessing the Impact of Large Language Models on PLTL Workshops Through Self-Perceptions at an R1 Research University**

- **Rajneet Saini**, University of Rochester

This research project explores incentivizing students to utilize AI as a valuable learning assistant rather than a tool for academic shortcuts, beginning with its use in Computer Science PLTL Workshops. To investigate preconceived perceptions, students enrolled in the Introduction to Computer Science course were provided an AI questionnaire to complete. This survey was readministered to all students, post-exposure to using ChatGPT in selective workshops. In addition, weekly surveys were distributed to assess students' understanding of the Workshop problem material. The intervention itself involved using pre-prepared prompts, which were demonstrated in front of the students. The results suggest that using ChatGPT in PLTL Workshops could have a positive impact on Workshop learning and on attitudes towards the use of AI in this environment.

## *Presentation – Implementation and Evaluation of PLTL*

### **Leaders Like Me: BIOL 110 Work-in-Progress**

- **Kyle Trenshaw**, University of Rochester
- **Mesha Ajaz**, University of Toronto

In order to help students relate to their peer leaders across differences, the Leaders Like Me project at the University of Rochester focused on creating biographical profiles for peer leaders in PLTL Workshops across campus that students could view in our learning management system (Blackboard) prior to attending any class meetings. Previous studies have shown a positive correlation between the number of times students viewed profiles and their likelihood to attend Workshops. We interviewed students about their experiences viewing profiles and attending Workshops in BIOL 110 during the 2019-2020, 2020-2021, and 2021-2022 academic years in order to better understand this correlation using emergent thematic analysis. Our work-in-progress study results suggest that profiles seen as generic or embellished may be less effective in generating a positive attitude toward attending Workshops than those seen as relatable, concise, and visually appealing. Further exploration of the data is ongoing.

# PRESENTATIONS & WORKSHOPS

Friday, May 31, 2024

## *Presentation – Implementation and Evaluation of PLTL*

### **A Closer Look at Belonging: Exploring Motivation, Value, and Suggestions for Improvement From 3 Semesters of Narrative Data from Black, Hispanic, Asian and White Student Participants in Peer-led Disciplinary Workshops**

- **Celia Evans**, Cornell University
- **Ryan Sauve**, Cornell University
- **Lisa Schneider-Bentley**, Cornell University

One solution to supporting belonging and success in first- and second-year engineering students may be to integrate a greater emphasis on community building in academic and co-curricular courses intended to support disciplinary learning. We train peer educators to facilitate 2-hour sessions each week that parallel some of the most challenging courses as students transition to university. A key component of these sessions is creating a welcoming environment and a sense of belonging for all students as they learn through structured collaboration. In these 1-credit courses Female, Hispanic and Black students are slightly over-represented relative to Male, White, and Asian students. We have begun to disaggregate ‘belonging’ outcomes for each of these groups. This interactive presentation will share our previous results and a further examination of narrative data from student mid-semester evaluations to explore differences across race/ethnicity/gender in what it means to belong, with a goal of equitably supporting all students.



# PRESENTATIONS & WORKSHOPS

**Saturday, June 1, 2024**

## *Presentation – Implementation and Evaluation of PLTL*

### **Extremely Early Planning for Conferences Pays Dividends**

- **Samantha Zepeda**, University of Texas at El Paso
- **Austin Blake**, University of Texas at El Paso
- **James Becvar**, University of Texas at El Paso
- **Geoffrey Saupe**, University of Texas at El Paso

Peer Leaders (PLs) benefit enormously from engaging with PLs and faculty at the PLTLIS conference from other parts of the world to bring ideas back to improve their home programs. This year, experienced Leaders from UTEP initiated travel planning during training week, well before the semester began. The authors presented to PLs who had never gone to the conference, how attending benefited PLs last year, what an abstract is, and the need for funding to support travel costs. Topics discussed were travel tickets, transportation in the city, and the costs of Airbnbs. A group chat was created for everyone considering attendance. During the semester there were 5 checkpoint meetings held to continue fleshing out plans and write travel grant applications, having an average of 10 attendees per meeting. Advance planning enabled the eleven PLs submitting abstracts to stay organized. The early planning reduced stress, eliminated problems, and was a success.

## *Presentation — Special Interest Topic: Publishing in APLL*

### **APA Style and Other Tips on Getting Your Paper Published**

- **Marilyn Anirak**, University of Texas Rio Grande Valley
- **AE Dreyfuss**, PLTLIS
- **James Becvar**, University of Texas at El Paso
- **Hector Leal**, University of Texas Rio Grande Valley
- **Nataly Amaya**, Florida International University

“APA style”: How could a three-letter acronym cause such immediate confusion and stress? Sorting through the guidelines and understanding the logic behind a reference style is one aspect of submitting a paper to *Advances in Peer-Led Learning*, the journal of the Peer-Led Team Learning International Society. Preparing a paper for publication will be the focus of this presentation for the elements to be considered before submitting a paper, whether to APLL or another academic publication. By utilizing a systematic approach as it is done in APA style, the author creates a format and structure that can be easily followed by its readers. During this presentation, we will break down these intricate guidelines to provide a much more digestible undertaking. By sharing our experience and knowledge, we hope to provide you with some newly-gained confidence when it comes to facing this finicky beast.

# PRESENTATIONS & WORKSHOPS

**Saturday, June 1, 2024**

## *Presentation – Workplace Skills Development*

### **The Bird’s Eye View of How to Write a Grant Proposal**

- **AE Dreyfuss**, PLTLIS
- **James Becvar**, University of Texas at El Paso

Undergraduates generally don’t know that granting agencies exist. Almost every institution and companies have funds to give away for good purposes. In this interactive session Peer Leaders (and others) will be introduced to key elements to write proposals to get the grants to support an innovative idea. The many elements and necessary preparation will be presented with an invitation for further discussion.

# PRESENTATIONS & WORKSHOPS

**Saturday, June 1, 2024**

## *Presentation – The Peer Leader’s Perspective: Peer Leader’s Contributions & Professional Development*

### **PLTL is Not Just for Coursework: Integration of Workshop Training into Other Student Experiences**

- **Taylor Newton**, University of Houston-Downtown
- **Jessica Gonzalez**, University of Houston-Downtown
- **Christina Hamilton**, University of Houston-Downtown
- **Allison McKee**, University of Houston-Downtown
- **Pamela Morales Diaz**, University of Houston-Downtown
- **Mj Asuncion**, University of Houston-Downtown

The Peer-Led Team Learning (PLTL) Program has thrived and evolved at the University of Houston-Downtown (UHD) during the past 23 years. The PLTL Training Program was developed using the PLTL philosophy. Originally, students participated in the PLTL training program with the goal of becoming a peer leader for the collaborative learning center or for the STEM workshops. However, the PLTL program at UHD has evolved to incorporate the workshop model into first year experience seminar course, peer mentoring, and research projects. Students who have completed the PLTL training program often participate in facilitating collaborative learning, influencing students to engage in active problem-solving, critical thinking, and peer-to-peer teaching. The collaborative approach of the PLTL workshops offers a dynamic learning environment where students work together to deepen their understanding of course material and develop critical thinking skills. The PLTL Training Program also allow students to develop several useful skills such benefits include networking and social skills, strategies for creating engaging classroom activities, teamwork, and a deeper understanding in subject material through diverse perspectives shared within workshops. We will share the students’ and peer leaders’ point of view of what we gain participating in PLTL driven programs such as training program, STEM workshops, peer mentoring program, first year experience seminar course, and research programs.

# PRESENTATIONS & WORKSHOPS

**Saturday, June 1, 2024**

## *Presentation – Implementation and Evaluation of PLTL*

### **Impact of PLTL in Engineering**

- **Eric Adams**, IUPUI
- **Christine Krull**, Purdue University

Peer Led Team Learning (PLTL) has been used successfully in 8 engineering classes at our institution starting in 2015. Engineering Thermodynamics, taught in the second year, was an original focus for PLTL due to high DFW rates. Often taken by students as their first engineering applications class, student success in Thermodynamics is seen as a key to retention. We have collected 8 years of data associated with PLTL in Thermodynamics, including qualitative and quantitative student survey responses, qualitative Leader feedback, comparative grading with and without PLTL, DFW rate comparisons with historical levels, and focus group analysis. Analysis of the DFW rates and student grades show modest improvement through PLTL, and the significant impact of COVID-19 remote learning. Student reaction to PLTL is overwhelmingly positive (>80%). Observational feedback from the Leaders drives change to class content. Finally, we have added qualitative survey questions linking PLTL and equity measures such as “social belonging” and “social connectedness” while simultaneously using the PERTS/Ascend measurement tool.

## *Presentation – Peer Leader Preparation*

### **Building and Communicating the Leadership Skills Developed Through PLTL**

- **Eric Adams**, IUPUI
- **Christine Krull**, Purdue University

One of the critical components of Peer Led Team Learning is the training of the Peer Leaders. The skills mastered by Peer Leaders, match closely with those most desired by industry. However, few industry hiring managers fully understand PLTL and their knowledge of the skills acquired by the leaders is often lacking. To support leadership development, and to assist the peer leader communicate what skills they have learned, IUPUI has developed a series of three 1-credit courses that Peer Leaders are required to take in tandem with their leadership assignment within the school. For the leadership course, students will reflect on their experience through a series of metacognitive reflection prompts modeled after research conducted by Olsen and Burk, 2014. The first targets just-in-time training for the classroom environment. The second develops the student’s personal leadership model. Finally, in the third, the student leaders assist in PLTL research projects within IUPUI.