



PLTLIS Newsletter

[01/23/19]

[Peer Led Team Learning International Society]

8th Annual PLTLIS Conference to be held at IUPUI, Indianapolis, Indiana

Thursday – Saturday, June 6-8, 2019

Pre-Conference Workshop: Introduction to the PLTL Model

Wednesday, June 5, 2019

Joined by colleagues from around the world who are deeply invested in innovative and effective educational practices, the Peer-Led Team Learning International Society's (PLTLIS) Eighth Annual Conference will provide a platform for instructors, administrators, students and others to discuss educational reform using Peer Leaders. With this year's theme, "Weaving Together Best Practices" the nature of building Peer-Led Team Learning programs and communities with Peer Leaders as the centerpiece will be at the forefront of our discussions of research and practice. The concept of training undergraduates as effective facilitators of learning is a data-driven transformative pedagogical strategy. Submit your abstract to PLTLIS 2019! Immerse yourself in powerful discussions, while connecting with passionate educators, administrators, and students sharing their experiences and work in PLTL.

Hosted by Pratibha Varma-Nelson

Professor of Chemistry and Founding Executive Director

STEM Education Innovation Research Institute (SEIRI) at IUPUI

Ne'Shaun Jones, Chair, Conference Planning Committee

For more information, info@pltlis.org

In This Issue



1. Call for abstracts for the Gallery Walk Showcase
2. Speakers: Cracolice and Varma-Nelson
3. Profiles of Milka Montes and Madeline Adamczeski

Gallery Walk Showcase of Collaborative Learning Activities



PLTLIS invites Leader teams everywhere to submit abstracts of collaborative team learning activities for consideration in the Gallery Walk Showcase

To submit the abstracts by February 15, 2019: Use the abstract submission form and state 'Showcase Entry' in the title for the abstract. Each PLTL Program may submit one or two proposed active learning activities.

To submit: [Click Here](#)

Each proposal requires an abstract of 250 words or less describing the activity, and a Team of 2 to 4 Leaders; some suggestions to address are provided below.

Each activity proposed must be designed to be completed within an 18-minute timeframe and the same activity will be given multiple times in succession (allowing participants 2 minutes' time to walk to the next activity).

The activity is designed to be interactive with participants, demonstrations of the activity, not talks. Detail how to conduct the activity by using conference participants as if in an actual workshop

Team members will conduct their activity up to eight times in succession during the Gallery Walk Showcase (over the course of two hours).

Each institution/program submitting a proposal might consider having two teams conduct the activity so that the second team can visit other activities for the first half of the Gallery Walk while the first team is conducting the activity, then switch roles.

Entries will be judged on creativity and likelihood the activity could be adopted or adapted by Leaders on other campuses.

Entries should push the creative potential of other Peer Leaders to come up with new ideas and make new projects to help further student comprehension.

Selected entries will be notified by May 1, 2019.

Selected teams will create handouts to distribute to participants: Make clear to participants what Leaders should be doing to use the activity in an actual workshop; Explain what students would be doing during an actual workshop to gain understanding from the activity; Describe what Leaders might do after the activity to help students reflect on the learning; Give possible follow-up assignment(s) to process what students learned

Will include name(s) of author(s), campus, discipline, and contact information (email)

Each abstract will:

- Introduce the essence of the idea, game, or original collaborative activity
- Explain the essence: What makes it work to help students learn? Why? How?
- Describe how the session will engage and immerse participants in interactive learning

During the Gallery Walk Showcase:

- PLTLIS Conference participants, the "audience," will be subdivided into the number of groups equal to the number of activities selected.
- All groups will start simultaneously at their designated station and rotate to the next station in the Gallery Walk after 20 minutes.
- The Gallery Walk will continue until all groups have experienced all activities.

Each abstract might:

- Introduce the essence of the idea, game, or original collaborative activity
- Discuss a: Card Game? Board Game? Pass a Problem? Jigsaw? Round Robin? Exploration?
- Explain the essence? What makes it work to help students learn? Why? How?
- Detail how to conduct the activity by using Annual Meeting participants as if in an actual workshop
- Describe how the session will engage and immerse participants in interactive learning
- Make clear to participants what Leaders should be doing to use the activity in an actual workshop
- Explain what students would be doing during an actual workshop to gain understanding from the activity
- Describe what Leaders might do after the activity to help students reflect on the learning
- Give possible follow-up assignment(s) to process what students learned

Note: The Chemistry Peer Leaders from UTEP proposed the Gallery Walk Showcase of Collaborative Learning at the 8th PLTLIS Annual Meeting in Indianapolis, IN. Please see the PLTLIS Newsletter for October/November 2018 to see the Los Lunas, NM 2YC3 model for this Gallery Walk.

Thursday, June 6, 2019 Keynote Address: The Brain, Physiology, Psychology and Implications for Instruction

Professor of Chemistry Education Research and Practice in the Department of Chemistry & Biochemistry at the University of Montana. He teaches general chemistry lecture and lab, undergraduate and graduate courses in teaching chemistry, and graduate courses in chemistry education. His general chemistry courses have included a peer-led team learning component for the past two decades. He has authored or co-authored textbooks for high school chemistry, introductory college chemistry, peer-led team learning in general and GOB chemistry, and college general chemistry. The general theme of his group's research program is investigations of how students learn chemistry. Specifically, Cracolice is interested in research topics such as the effectiveness of curriculum design, the facilitation of the development of scientific reasoning skills and general intelligence, and transfer of learning. He is also involved in the professional development of high school and college science instructors.

The overarching theme of this presentation is *development*, exploring how the brain physically develops over the human lifespan. The brain forms in the third gestational week, grows further after birth until it reaches about 90% of adult volume by age 6, and reaches maximum volume at the onset of adolescence. It then enters a healthy pruning phase influenced by the environment into early adulthood that is critical in establishing young adult brain physiology. After approximately age 40, the volume of the brain again begins to decrease, and this continues for the remainder of one's life.

Developmental psychology correlates with changes in brain physiology, first focusing on the middle school, high school, and college years. The work of founders of developmental psychology will be presented, establishing a model of how learning occurs. Problem solving and the importance of deconstruction and re-representation of problems will be presented, and how this relates to a student's developmental level. The implications for instruction will explore how the peer-led team learning model provides a learning environment that allows instructors to design curricula that transcend simple content knowledge transmission, providing an opportunity to facilitate the development of the reasoning and problem-solving abilities of students.



1 - Mark Cracolice

Thursday, June 6, 2019 Keynote Presentation What Are the Limits of Adaptability of the PLTL Model?

Professor of Chemistry and the founding executive director of the STEM Education Innovation and Research Institute at Indiana University-Purdue University Indianapolis (IUPUI). Before she joined SEIRI she was the executive director of the Center for Teaching and Learning. She is well known in the STEM education community for her pioneering work in the development, implementation and dissemination of the Peer-Led Team Learning (PLTL) model of teaching. She has been a Co-PI of three NSF funded National Dissemination Grants. In addition she was a founding Co-PI of the first NSF funded Undergraduate Research Center "Center for Authentic Science Practice in Education, (CASPiE)." Her research group is currently working on the development, implementation, evaluation, and dissemination of cyber-PLTL (cPLTL). For the cPLTL project, she has received funding from IUPUI, NSF, and EDUCAUSE, Next Generation Learning Challenges. This work broadly informs the understanding of how students learn chemistry (general and organic) in online environments as well as in face-to-face environments. Dr. Varma-Nelson is co-author of several publications about PLTL, cPLTL, and CASPiE and has made numerous presentations in local, national, and international venues. She co-authored the 2011 AAAS report, "Vision and Change in Undergraduate Biology Education: A Call to Action" as well as

several other national reports. Varma-Nelson received James Flack Norris Award (2008), Stanley C. Israel regional award from the American Chemical Society (2011), George C. Pimentel Award (2018) among others. In 2017 she was selected as the ACS Fellow. She received her Ph.D. from the University of Illinois at Chicago and her B.Sc. from Pune University, India.



2 - Pratibha Varma-Nelson

In the 1990's, Leo Gafney, the PLTL National Project evaluator, articulated six critical components for successful implementation of PLTL, based on the evaluations he had conducted at several campuses around the country. Those six Critical Components will be revisited in this presentation and discussed in terms of evaluating the fidelity of implementation of the PLTL model. A seventh critical component will be suggested. The value of these components in implementation of cPLTL will also be discussed. This talk is adapted from a chapter co-authored by Pratibha Varma-Nelson and Mark Cracolice.

Profiles: Milka Montes



Milka Montes is a First-Generation college student and Hispanic Woman in Science, who holds a Ph.D. in Chemistry. As such, she understands the need to encourage capable students to pursue and continue their education in the Science, Technology, Engineering and Mathematics (STEM) fields.

“Being bilingual in Spanish and English helps me connect with students and the community and develop excellent verbal and written communication skills. As an associate professor at the University of Texas at Permian Basin (UTPB), I thrive in the many opportunities to mentor and motivate students to carry on with their academic goals while enjoying this crucial stage in their lives, including serving as NSF-LSAMP Camps Director at UTPB. I participate as an active member of different organizations such as American Chemical Society (ACS), Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), and recently became a board member of the Peer-Led Teaching Learning International Society (PLTLIS), which is such an honor as I am a product of the early PLTL programs in Chemistry at UTEP.”

Profiles Madeline Adamczeski



Madeline Adamczeski earned her Ph.D. at UC Santa Cruz and began working in Bay Area’s pharmaceutical and technology industries before returning to academia. Following a post-doctoral fellowship and part-time teaching positions at Los Positas and Diablo Valley colleges, she began teaching chemistry and oceanography full-time in 1994, first at American University in Washington DC, then at San Jose City College (SJCC) in Silicon Valley.

With local, state, and federal funding, including National Science Foundation and more recently Title V: HSI grants, she was instrumental in initiating and implementing Peer-Led Team Learning workshops not only in collaboration with faculty who teach STEM classes at SJCC-Metas Center but also with faculty

outside of STEM and at other academic institutions around the country. Since 2011, she has served as an ambassador of On Course with the goal to help colleges improve student success and retention. In 2011 Dr. Adamczeski was recognized with a Santa Clara Valley-American Chemical Society Teacher-Scholar Award. During the 2018-2019 academic year, she was on sabbatical as a visiting scientist at UCSC and, in part, collaborating with faculty, students and staff in student-support programs, including Cal Teach, ACE, and Learning Assistance.

We exist to assist students and programs devoted to group active learning paradigm. In that regard we invite you to make contact with us for any concern or interest you may have.



We would love to hear from you.

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