

# Training Undergraduate Team Leaders for a Research-Based Laboratory Course

Anne K. Bentley, Matthew A. Hoch,  
Pratibha Varma-Nelson,  
Gabriela C. Weaver



# Background

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Peer leader training is essential to the success of PLTL.

- one-day training session
- ongoing training via
  - course taught by learning specialist
  - staff meetings

[www.pltl.org](http://www.pltl.org)

Tien, L. T.; Roth, V.; Kampmeier, J. A. "A Course to Prepare Peer Leaders to Implement a Student-Assisted Learning Method" *J. Chem. Educ.* **2004**, *81*, 1313-1321.

# Spring 2006 PLTL

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- 5 schools, ~120 students, 22 peer leaders
- one 2-day PLTL training session for all
- variety of PLTL implementations
- surveys and interviews conducted with peer leaders and students

# Concerns about Training

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- confusion about peer leader role

“I think one area where I was a little bit confused was what exactly was my role in the lab because there was a TA.” - **in-lab peer leader**

- too much focus on workshop training

“I went to the thing in Chicago and a lot of that seemed to focus on the, the, you know the little lessons that they would do outside of lab which we didn't ever do, we don't have an outside time to do that. So it seemed to not focus on what we were gonna do.” – **in-lab peer leader**

- lack of module training

“If we had questions, she really couldn't answer 'em.” - **student**

“We as the peer leaders we were kind of lost [...] we were having trouble answering them sometimes.” - **outside-of-lab peer leader**

# Suggestions from Peer Leaders

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Future training should include:

- observing a PLTL group led by an experienced leader
- leading a group and receiving feedback
- written material

# Revisions Made to Training

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- added activities in which trainees
  - define peer leader role
  - participate in a CASPiE workshop activity
  - develop ways to phrase questions and encourage discussion
  - lead a workshop activity
- created a training handbook for peer leaders
- developed a training supplement for future peer leader trainers
- wrote workshop supplements

# Spring 2007 PLTL Training

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- training session offered 3 times
- 43 peer leaders total from 8 schools
- Purdue peer leaders also attended a one-day module training session

# Training Session

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Welcome

CASPiE

Role of the Peer Leader



Introduction

Physical and Verbal Do's and Don't's

Talkers and Listeners

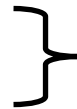
Responses to Student Questions

Asking Productive Questions



Group dynamics

Mini Workshops



Practice leading

Journals

Peer Leader / Group Relationships

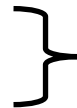
Professionalism

First Day



Guidelines and  
looking ahead

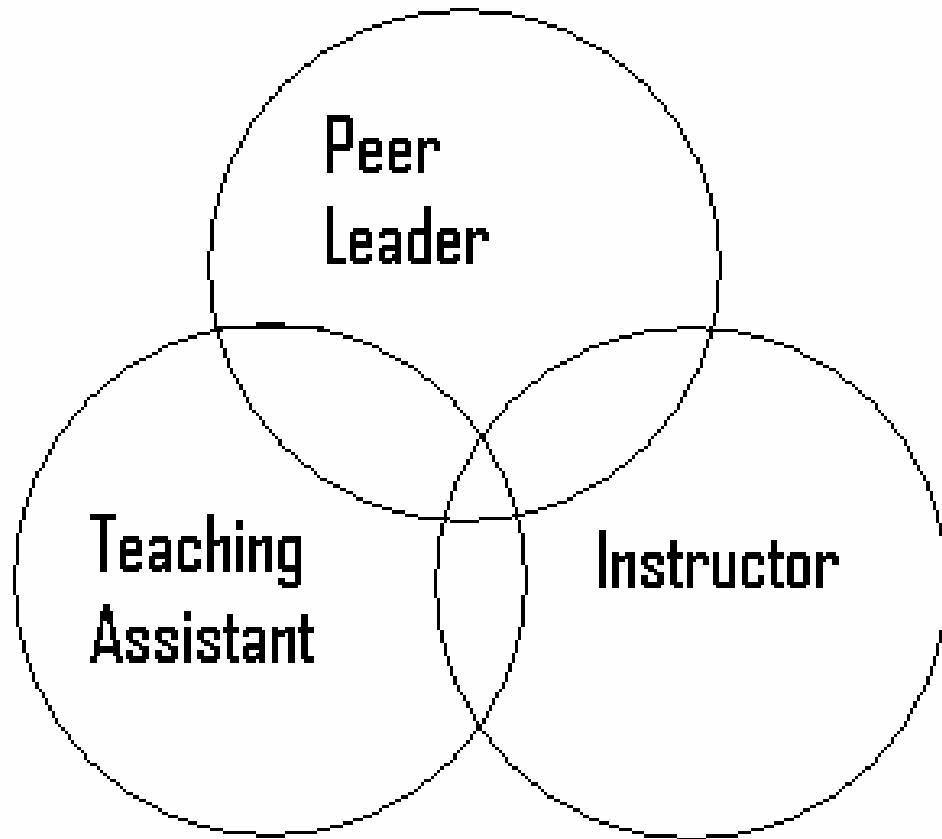
Wrap Up



Evaluation

# “Role of the Peer Leader” Activity

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recent learner  
learning expert  
chemistry expert  
buddy  
counselor  
advisor  
coach  
role model  
troubleshooter  
grader  
enforcer of goggles  
logistics coordinator

# Training Session

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# “Mini Workshops” Activity

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- recognizing writing style in papers
- what can we conclude from graphs?
- preparing a poster
- laboratory experiment



# Training Session

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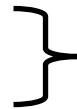
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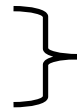
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Evaluation

# Feedback from Training Sessions

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- the most beneficial activity was Mini Workshops (identified by 9 of 15)
- suggested for removal: Talkers and Listeners (suggested by 4 of 15)

(Purdue peer leaders)

# Feedback from Training Sessions

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- What is the single most important point you learned from this training workshop about being a peer leader?

“How to lead the students into discussions and make them think, rather than just giving them the answers” - Purdue peer leader

“I thought being a peer leader was like a tutor, but it's more like a discussion leader.” - Purdue peer leader

- Which aspect of peer leading do you feel you do not understand as well as you would like to?
  - the most common answer was “the lab module”

(Purdue peer leaders)

# Spring 2007 at Purdue

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- ~275/360 students volunteered to attend PLTL meetings
- 19 peer leaders
- weekly one-hour staff meetings
  - reports from lab, discussion of module
  - discussion of workshop meetings and journal entries
  - training for the next workshop

# Mid-Semester Feedback

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Purdue peer leaders report:

- PLTL is helping students be better prepared for lab
- the most helpful parts of weekly training meetings:
  - going through the workshops
  - hearing about other leaders' experiences
- top concern about PLTL at Purdue right now is attendance

# Future Plans

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- end-of-semester interviews with peer leaders at Purdue
- future PLTL training will be coordinated at individual schools

# Summary

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CASPiE PLTL training should include:

- “hands on” group-leading experience
- lab module training
- ongoing communication between instructors and peer leaders

# Acknowledgements

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