A Student's Perspective on CASPiE at Purdue University

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CASPiE

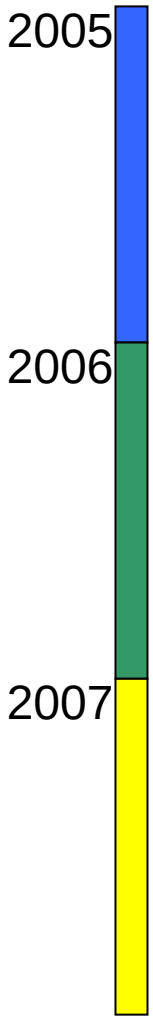
Introductions

Matt

-Piloted antioxidants module
-Piloted PLTL Materials with Students

-Peer leader (again)
-Revised PLTL materials and developed training materials

-Spring ’07 ongoing peer leader training



Kelly

-Enrolled in CASPiE section of general chemistry
-Revised PLTL materials and began developing medicinal organic module

-Continued module development

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CASPiE Pilot, Spring 2005

- 12 students in second semester general chemistry
- Registration was voluntary
- 1 module in 8 weeks (Antioxidants)
- A complete second lab apart from general chemistry
- 1 credit hour in CHM 290

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Why did I choose CASPiE

- Curious about the idea of research
- Looking for resume builder

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Lab Arrangement

- Weekly meeting outside of general chemistry lab
- Only one, three person lab team at a time
- Small chemistry lab
- Two TAs in lab at all times
- Some analysis done in the lab

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Conclusion

- Difficulty with module being written as we progressed
- Uncertainty about what was coming next
- Close work with TAs, many questions and issues
- Good coordination within group
- Lab work was not completed within semester

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Peer Leading, Fall 2005

- One PLTL group consisting of two 3 person lab teams
- Two peer leaders
- Weekly workshop with group for one hour outside of lab
- Workshop time and location determined by the group and the peer leaders
- Weekly meeting with instructor to prepare

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Workshops

- Lasted an hour
- First 15 minutes for lab discussion
- 30 minutes for workshop materials and activities
- Mandatory attendance
- Peer leaders alternated between activities and questions

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Conclusions

- Team leading was helpful but difficult to coordinate at times
- Scheduling was troublesome
- Staff meetings with instructor were very helpful

CASPiE at Purdue, Spring 2006

- One section of general chemistry lab (22 students)
- Registration was voluntary
- Two modules completed
- Two TAs and one instructor in lab
- Four PLTL groups with required weekly attendance

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Why did I choose CASPiE?

- Bored with regular laboratories
- Wanted a challenge
- Hands-on lab experience – necessary when applying for a position in a research laboratory
- Higher quality lab partners

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Anticipation and Confusion

- Long term research vs. self-contained labs
- Misunderstood the strength of the connection between CASPiE and the professor who wrote the module
- Confusion about writing the pre-lab
- Confusion about experiments in lab

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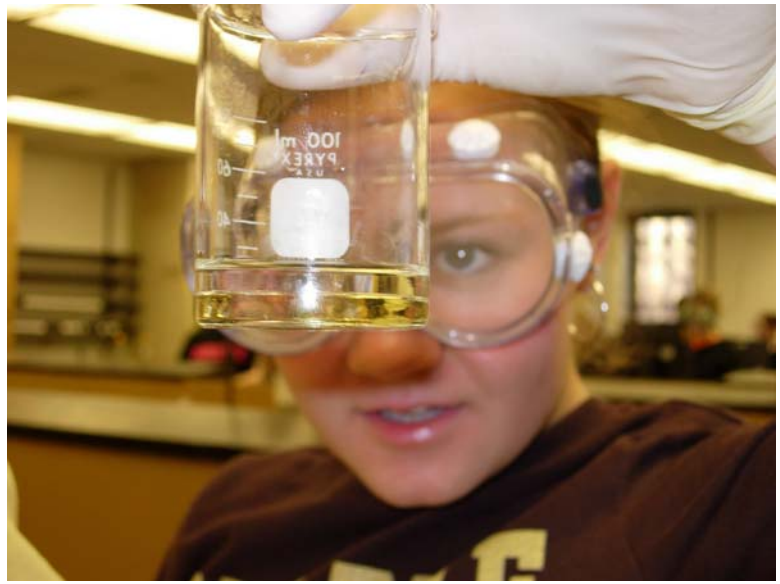
Timeline of the course



- Module 1

  8 weeks of lab work, poster session at end

- Module 2

  8 weeks of lab work, individual written reports at the end

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PLTL

- Workshops were generally repetitive, frustrating, and pointless

  -Peer Review Workshop

- PLTL meetings offered a time for collaboration with another team

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Peer Leading, Spring 2006

- One hour workshop outside of lab
- Very smart group (Not average)
- Often bored with materials due to previous exposure
- Lab portion was helpful

Team Dynamics

- Great coordination with division of work in lab
- Worked together on prelabs and other projects
- Team evolved throughout the semester

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Final thoughts

- Gained experience in presenting and writing about research
- Explored new chemistry
- Higher caliber lab partners
- Not enough time in lab for experiments
- Labs unrelated to lecture
- Overall, a beneficial experience

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