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# USING LEARNING ASSISTANTS TO ENCOURAGE ACTIVE LEARNING

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Justin Dunmyre

Frostburg State University

[jrdunmyre@frostburg.edu](mailto:jrdunmyre@frostburg.edu) or, the *much* cooler, [mathemagician@gmail.com](mailto:mathemagician@gmail.com)

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# WHAT DOES A LEARNING ASSISTANT (LA) DO?

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- Attends every class meeting of a particular section
  - Facilitates group work and active learning
  - Holds additional office hours in the Math Assistance Center (MAC), which is exclusively staffed by LAs.
  - Attends a one hour “prep” meeting each week.
  - Attends a one or two hour teaching seminar (Pedagogy Course) each week
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# FACILITATING ACTIVE LEARNING

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- During small group work, the LA and Instructor together roam about the room.
  - There are many questions that students are more likely to ask a fellow undergraduate (the so-called dumb questions)
  - With an LA, students can get unstuck more quickly if they're just misunderstanding the directions.
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# BENEFITS OF HAVING AN LA IN THE CLASSROOM

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- They bring teacher moves from other colleagues into view
  - Practice what I preach: we must model our best teacher moves
  - There is no force more likely to stop me from lecturing than my LA staring at me in absolute boredom
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# BENEFITS OF HAVING AN LA IN THE CLASSROOM

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- Opportunity to situate students of color and women into positions of authority / role models
  - LAs can cover a class on occasion
  - They can often facilitate set-up and breakdown of the classroom
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# LA OFFICE HOURS

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- Our LAs hold evening office hours, Sunday - Thursday.
  - Our Math Assistance Center (MAC) is staffed by two LAs during each hour that it is open.
  - Opens up space for non-standard assessments. We've used the MAC hours for:
    - Reassessments in Mastery Grading courses
    - Group Tests
    - Gateway exams taken on WeBWorK that require a proctor.
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# THE “PREP” MEETING

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- Part I: Give the LA space to work through all of the material that you are likely to cover before the next prep meeting.
  - While the LA works through this material, they can ask questions / point out typos
  - You will also discuss where students are likely to get stuck, and good prompts to get them unstuck.
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# PREP MEETING PART II

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- Reflection on how classes went last week:
    - This has tremendously improved my worksheets.
  - Anticipating students in need
    - In the chaos of an active classroom, it's easy to miss or forget things—a brief discussion with your LA can bring important events into focus.
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# THE PEDAGOGY COURSE

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- Most LA models require all LAs to have taken a course in pedagogy before they become a learning assistant.
  - Our program is still small, so we recruit LAs by talking to students who were both successful in the classroom and bought into active learning. So there is less of a need to sell them on it.
  - Our LAs take the pedagogy seminar every semester.
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# GROUP THERAPY

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- Occasional assigned reading (usually digestible education stuff, especially Francis Su's writing)
  - In addition, our weekly discussions serve to:
    - reflect on their experience as an LA
    - build community with the other LAs
    - ask questions they might not ask their main instructor (e.g. "I'm embarrassed that I can't seem to break the ice on this one group...")
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# LAUNCHING OUR PROGRAM

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- We began with a regional Learning Assistant Alliance workshop (<https://www.learningassistantalliance.org/>)
- Proposal to the Provost: Pilot program, \$1200/LA for a 4 credit course. I asked for two LAs for my two sections of Calculus I, and grading support for the extra scheduling overhead.
- It helps to include good active learning pictures in your proposal





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# SUSTAINING OUR PROGRAM

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- We charge a course fee to enroll in an LA supported course: \$45 for 3 credit courses, \$50 for 4 credit courses
    - Automatically handled by registrar, similar to lab fees
  - Caveats for the instructor:
    - Must use OER or cheap ( $\leq \$30$ ) course materials that
    - Must be committed to active pedagogy
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# AN LA'S PERSPECTIVE

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“For many of the engineering classes that I was in, I wanted to just listen to a lecture, be told how to do the math, memorize a pattern, and push out the correct result. I did not think I needed to actually learn. I knew how to get good grades and I did not need to learn to do it. Since starting in the new College Algebra classroom, this is not who I am anymore. As the students became more intent on trial and error, I began doing the same. I tried problems over and over again using the skills that my lectures had taught. I messed up a lot, but I kept trying and when I finally would get the right answer I would be overjoyed. It felt amazing to figure out a problem on my own. For the first time in a very long time, I felt that I was learning and it felt good.”

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# THANK YOU! QUESTIONS?

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- Slides available at: <http://mathfest2019.davidfailing.com/>
  - Email me: [jrdunmyre@frostburg.edu](mailto:jrdunmyre@frostburg.edu) / [mathemagician@gmail.com](mailto:mathemagician@gmail.com)
  - Also check out regional / national Learning Assistant Alliance workshops
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