**EOS-SEI-sponsored pizza lunch for TA's,  April 18<sup>th</sup> 2011:**          **Trouble shooting session**

Today's focus was decided by consensus at the last meeting (March 28). Participants were encouraged to bring in difficulties they have experienced, then discussion was to revolve around characterizing the problems and identifying ways of addressing them.  This worked well today, with 9 participants discussing the same issues.  This format should work well with any number of participants by breaking into groups based on common interests.

Topics needing "trouble shooting" that were identified today included:
1. Motivation – how to help the few students who really don't want to be there, find a reason to contribute.
2. Managing relations with the instructor/professor
3. Managing group work
4. How to improve efficiency at any aspect of the TA's job. Marking in particular was mentioned.
5. How to ensure consistency of marking, and use of rubrics.

Item #1, "**motivating students who don't seem interested**", was the focus for most of today.  These are based on Francis's notes, with edits and adjustments by Josh – thanks Josh!
1. First, a distinction was recognized between "motivation to do the work" and "buy-in" regarding the learning activities. We chose to focus on the first. However, one point about "buy-in" that was mentioned is that buy-in may be a more common problem than motivation in upper level courses (eosc516 was mentioned), whereas motivation may be more of an issue than buy-in in lower level courses (eosc111 being the prime example).
2. We all agreed that it is usually only a small number of students who are poorly motivated, but that these "high maintenance" individuals can cause disproportional difficulties by negatively impacting the group they work in, and/or by consuming more time than other individuals.
3. If a group is not working well, it is worth determining whether one or more members are poorly motivated. If that is the case, read on for ideas. HOWEVER, groups can be dysfunctional for a wide range of reasons, so don't try to fix a group using motivational tactics if the problem originates in a "buy-in" issue. For example, someone wanting to work alone is not a motivational problem, it is a problem with buying into the notion of working as part of a group or team. See "future topics", and item #13 on http://www.eos.ubc.ca/research/cwsei/resources.html .
4. Also note the distinction between "**un-motivated**" and "**de-motivated**". The first is all about students who just don't want to do the work or cannot see the point. The second involves LOSING motivation as the work proceeds. An example was brought up, involving a course with complex programming tasks that may not have sufficient intermediate milestones for students to succeed at. Maintaining motivation requires repeated success. You can't expect every student to have the tenacity to stick to a long complex problem when there are few indications that they are making progress. Especially when at the end of the work they "fail" in some way and are poorly equipped to identify where along their work path they misjudged or made a mistake. Therefore …
   a. Try introducing opportunities to check that progress is on track. This might require interacting with the instructor and/or exercise designer.
   b. Consider demonstrating empathy by recounting similar experiences of your own.
   c. Use your tutoring skills to help students walk through their work to identify check points.
   d. Demonstrate the "self checking" behavior that students must develop as they carry out the work.
5. Ice breaker activities are sometimes used early in a course to build group working skills and habits, and as a way for students to build affinity with peers. Consider asking the instructor whether these activities could be developed specifically to generate motivation for work students will carry out during the course.
6. Refer students to the course learning goals and how work relates to the intentions of the course. Motivation is LIKELY to be low when students don't see how their work fits into the purpose of the course. Students may feel less motivated if they  feel they are doing busy work that contributes little to their grades. That is not to say that grades are the only motivational force. BUT, there will be more people who "don't care" if the work they do is not clearly going to help them

do well – whatever that means for the particular course. This aspect is yet another place where the instructor must be involved. In other words, there must be clear learning goals for the lab and connections made to the rest of the course, and you the TA might have to point out deficiencies in this aspect to the instructor.

7. Debrief the lab, exercise, tutoring or marking session as soon as possible;  i.e. take some time to think about what worked and what didn't work during the session. Yes it takes time, but this can be done fairly quickly. Also, if you are able, pass along experiences to colleagues who are (or will be) TAing in similar ways later (for example, to TAs in subsequent sections of the lab), especially if there is a point where many students are getting stuck or if there is a glaring error.

8. If a lab does NOT have a log book, start one. The instructor in charge SHOULD be using a log book to help manage the lab aspects of the course.

9. Regular interaction with the instructor is a key for figuring out how to prevent future motivational issues.

10. Show enthusiasm yourself. Nothing is as de-motivating as a teacher or TA who doesn't visibly seem to care about the material or skills being learned. Get excited!

11. Start lab by posing the question "Why should anyone care about this topic?" Initiate a discussion with the students on how the topic relates to their lives or the real world, perhaps citing a recent world event or newspaper article.

12. One way to show you are interested in the material, and in student success, is to NEVER SIT DOWN. If the lab or exercise seems to be going well, then circulate and interact with each student or group. Ask "how's it going?" Only by communicating will you be able to provide support with the technical, motivational and self-regulatory aspects of work you are helping students with. Students will respond to your initiative by asking questions and engaging with you.

13. Firm deadlines are important. Looming deadlines can be strong motivators.

14. Identify in a copy of the instructions that students use, places where analogies are needed, or other ways of connecting work to reality. These annotated instruction sets will be essential contributions to improving the work in future versions of the class. Give these notes to your instructor and fellow TAs.

15. Some situations might benefit from explicit "check-ins". This is when everyone has a chance to indicate how they are feeling about the work right now. For example, around midterms, you could ask everyone to indicate how much pressure they feel at this time of the term. It can be helpful if students realize they are not the only ones experiencing temporary difficulties, lack of motivation or stress.

16. Someone mentioned that perhaps it isn't up to a TA to worry about student motivation. There is some justification to this perspective – students are adults, they have chosen the course (or the discipline), and in the end, the instructor is in charge of the course. However, here is a quote from the "highly effective tutors" resource:

    "*Tutors steer the tutee's learning by using two diagnostic models, usually simultaneously: (a) Cognitive models and (b) Motivational models.  Decisions made by tutors are easy when both models point in the same direction, but are more difficult when cognitive and motivational indicators point in different directions. In response to such situations, expert tutors demonstrate strategies that may be counter intuitive, and demonstrate sophisticated degrees of perception about the student.*" See item #16 at http://www.eos.ubc.ca/research/cwsei/resources.html

Finally – stay tuned.  Future topics of interest that were identified by today's participants all include aspects of the job which relate to motivation in some way. Ideas include:

1. Working with the teaching team (or how to manage the instructor in charge ☺ ).

2. Tutoring when students are in groups. This very broad topic could (should?) include (a) Sharing of experiences, both good and bad; (b) Identifying different group-learning settings and considering pros and cons of each; (c) Theory about groups and group- or team-work.

3. Marking, particularly consistency and efficiency of marking, and use of rubrics.

Thanks to grad council, and to everyone for interest and enthusiasm. Please contact Francis fjones@eos.ubc.ca with questions or comments about these notes. AND … please contact anyone in EOS-SEI (website below) with any questions or comments about teaching or learning!