# Peer-Led Team Learning (PLTL) Leader Training Workshop

Presenter: Dr. Anna Harris

Department of Mathematics and Computer Science

## What is a workshop?

- Small groups of students get together under the guidance of a trained student.
- In this case you are to be the trained student who has already been successful in the course you are assigned to. Other members of the team include the instructor and the participants themselves.
- A workshop is not a reprise of the lecture (i.e leaders are not expected to repeat the exact subject matter)
- ▶ A workshop is not a question and answer session (i.e leaders are not to "fill in the blanks" for students), the roll of the leader is to help the student understand the material.

#### How many, how often?

- ► The class is divided into small sets of students usually six to eight per group and your group is expected to meet weekly for the duration of the semester for between 1½ to 2 hours a session allowing them to rely on these sessions for help.
- No answer key to the workshop problems will be provided as it can undermine the nature of the workshop and what we are trying to achieve.
- The workshop material must be challenging so that active learning and collaborative learning will be encouraged.
- Leaders will be given strategies for helping students and the instructor will be very involved with the workshop as well. Group size, location, scheduling, resources and communication will be taken into consideration and support will be provided from the institution's administration.

#### What is a leader?

- Workshop leaders are not instructors you are experts in learning the specific subject material.
- As leader's you are not teaching assistants or "Answer" men, you are expected to be supportive and friendly with your group members during sessions.
- ▶ This means you are more **like a coach**, demonstrating genuine personal concern for your students as they are close in age to you.
- ▶ A good leader uses trouble shooting to help groups solve problems and is expected to be a good role model to the members of their groups.

- 5
- Students count on you to show up to your sessions on time and prepared for the module you will be teaching.
- ► Leaders should also collaborate to help better understand subject material.
- We want your heartfelt commitment and participation as leaders but not at the expense of your well-being as we are aware that leading takes a little time for preparation outside of the sessions.
- Don't let your students make you feel responsible for knowing it all when they ask questions that you are not able to answer, challenging the group to solve such a problem can take you out of the hot seat.
- ▶ You are not responsible for solving student's life crisis'.
- ▶ There are to be boundaries between you and those in your group who you may have had realtions with before the workshop.

## Preparation

- Setting up the classroom effectively before sessions is important.
- Nothing will help as much as good preparation.
- ▶ For the very first session, spend twice as much time preparing as you plan to do for the future classes by re-reading all of the content.
- ▶ Prepare a summary sheet to help students "see the forest for the trees" and to help you with refreshing the material.

# **Keep in Mind:**

- What will the students' reactions be when they read the problems for the first time?
- What terminology needs decoding?
- Where are the clues in each problem that will help students get started?
- ▶ Where are the bear traps?
- How will you confirm your own understanding of the solution?
- Are you ready to create a comfortable working environment in your group?

#### Your First Meeting

- ► Arrive 5-10 mins early to settle in before students arrive (a few butterflies in your stomach is okay).
- You should have a copy of the text and any worksheets the class are to be working on.
- ▶ Introduce yourself to each student, also telling them your job as leader, and have them introduce themselves to each other.
- "Bonding" is crucial to the success of the workshop at the beginning this may seem awkward.
- ► After introduction get straight to business. "Now that we know each other a little better, lets take a look at the class problems for this week"

- ▶ Remember, many people would rather fail later than look stupid in front of others at that moment and so your job is to make the members of your group comfortable with speaking in front of each other. This can be achieved by pairing questions and statements similar to the following together.
- "Could I get somebody to read this problem aloud for the group just so that we can get it on the table?"
- "I have a feeling it's going to take all of us to solve this one."
- ► A little amiable competition is seen as effective, this making further sub-dividing your group for friendly games a good idea.
- Personality is unrelated to actual knowledge of the material and so it should not be used to determined how good or bad a student is able to handle the material.

# Few Tips

▶ Identify the needs of each of your group members.

Throughout the semester, plan for adequate time to prepare for your workshop.

Use your own experience as a guide.

▶ Try the one-minute paper. (A few questions about the work at the end of the session).

► Make use of the faculty

## Few Tips

Students differences should be understood and respected as intelligence, this will help with your approach to different learning styles.

▶ There can be many routes to the same goal.

► For example, logical thinkers learn step-wise, musical thinkers follow patterns, kinesthetic learners write out the material to learn, spatial learners visualize.

## Types of Intelligence

- Linguistic
- Musical
- Logical/Mathematical
- ▶ Spatial
- ► Kinesthetic/Bodily
- Intrapersonal
- Interpersonal
- ▶ Naturalist
- Existential

# We're not computers

- ► The human brain is not able to record information like a computer does however most students seem to think like that. The truth is certain things aid in our memory functioning this well.
- ▶ These are:
  - meaning must be given to what is being memorized
  - the material should be tied to previous learning.
  - a good attitude while learning
  - the right feelings while memorizing
  - information learned must be used soon making practicing and review important
  - social interaction while learning

# Strategies

- Here are some strategies for helping students with learning and retention that you can use:
  - Concept Maps
  - Flowcharts
  - Writing to Learn
  - \* Pair Problem Solving
  - Inquiry-based Learning

# Strategies

- In choosing your approach to learning or your concept for learning take into consideration that it should be:
  - Intelligible- new concepts should have their application taught as well to make the information meaningful
  - Plausible- should be explained clearly
  - Fruitful- it should encourage sharper thinking

# Strategies

- Your goal should be to try to help students achieve a chain of reasoning through the choices they make.
- ▶ In other words, you should try to show them how everything is related because relativism is "the common characteristic of all thought, all knowing, all of man's relation to his world".

#### Motivation

- Motivation is the engine that either drives us or fails us and can be internal or external.
- ► External motivation is more along the lines of rewards and punishments to induce someone into doing something.
- ► These are effective in getting students started however in order for them to become immersed in their course internal motivation is necessary.
- With internal motivation, the amount of time or the number of pages becomes much less of an issue for the student and so learning is heightened.

#### Motivation

- Promoting some of these things in your workshop can boost motivation:
  - Self-Determination
  - Competence (sense of 'getting a grip')
  - Autonomy (feeling that we are our own agents of change)
  - Relatedness (a person's strivings to relate to and care for others, their authentic relation to that person and a person's satisfying involvement with the social world)

#### Motivation

- ▶ Here's how to achieve internal motivation in sessions:
  - Help them see how far they have come in learning.
  - Talk to them about their reasons behind school and their futures.
  - Assist them in articulating their thoughts
  - Compliment them on their work and their supportiveness of each other.

## Race/Class/Gender

- ▶ A few issues to be mindful of
  - \*Everyone in your workshop deserves an equal chance to do well in the course.
  - Smaller study groups help equalize opportunities for everyone.
  - The demographics of science have traditionally been skewed and the current demographics of science still do not match the demographics of our society at large.
  - If you have a student who is only one of his/her gender or culture in the group pay special attention to the situation.

## Race/Class/Gender

- ▶ Pay attention to the little stuff, like jokes or comments.
  - \*Such things can be distraction not only to the group at large but also very distracting to the receiver of such comments putting them and you in an awkward position, slowing down the progress of the session.
  - Things can also escalate further and become very destructive to the group and this is why special attention must be paid.
- Expect everyone to do well.
- ► Help students who have been taught not to believe in themselves change their minds.
- ▶ Give credit fairly throughout the group.

- Mobility Support students who use wheelchairs will need accessible space as well as a table of a specific height, this should be accommodated by faculty.
- ► Visual Support Students with low vision may need a program to enlarge material, an audio copy of the material or for you to speak clearly and concisely.
- ► Hearing Support students with limited to no hearing may need special hearing aids, FM loops, real-time captioning on videos or even a note taker. Sign language is an option for these individuals as well.

- Support for Learning Disabilities students with learning disabilities may have difficulty understanding spoken or written language or in listening, thinking, speaking and completing calculations.
- ▶ In this case you should take your time to learn this individual's learning strengths and weaknesses and provide a form of learning that would better suit them.

- Support for Emotional Disabilities These include depression, anxiety, obsessive-compulsive thoughts, bipolar disorder etc...
  - \*These students are likely to tune themselves out of sessions and may experience short term memory loss because of the lack of concentration.

- Support for Emotional Disabilities Don't be mislead, studies show that these students are no more violent than any others but here's how you can help them:
  - Assist students with time management and study strategies.
  - Provide breaks when appropriate
  - Include a variety of methods for the presentation and explanation of problems
  - Repeat instructions and explanations
  - Create summary sheets
  - Keep an eye on the dynamics of the group

# Any Questions?

# Credits: HBCU-UP TIP Grant