## Techniques for Ensuring Equal Participation: Dictionary of Methods and Strategies

**Three Tokens:** Prior to class distribute three tokens to each student (any kind of cardboard card, playing cards, Legos, etc.). Once class or a certain part of class discussion begins, students "spend" their discussion tokens each time they speak, placing them in a "Recycle" container. Once they have used all their tokens, they no longer may add comments to the discussion. This activity helps control students who tend to dominate discussions; they will consider more carefully when a comment is worth making. Quieter students may be incentivized by the loss of points for not spending their tokens. Resources: Adapted from Carmen Siering, Indiana University

Wait Time: Students are typically given less than one second to respond to a question posed by a teacher. Increasing the "wait time" from three to seven seconds increases: 1) the length of student responses, 2) the number of unsolicited responses, 3) the frequency of student questions, 4) the number of students who answer a question, 5) student-student interactions, and 6) the incidence of speculative responses. In addition to pausing after asking questions, research shows that many of these same benefits result when teachers pause after the student's response to a question, and when teachers do not affirm answers immediately. Research indicates that when teachers increase their wait time to more than three seconds in class discussions, achievement on higher-cognitive-level science test items increases significantly. This holds for test items involving content, the process skills, and items involving probabilistic reasoning. However, care must be taken in applying wait time judiciously. The optimal wait time for a given question should be adjusted to the cognitive level of the question, and students' responses should be carefully monitored.

Taken from: <a href="http://agpa.uakron.edu/p16/btp.php?id=wait-time">http://agpa.uakron.edu/p16/btp.php?id=wait-time</a>

**Discussion Dominance:** Research shows that teachers call on males more than females; white males speak longer and get more follow-up questions. Students can take turns tallying and timing who gets the floor in class and for how long. The class can discuss the results and what to do about them.

Resources: (Altermatt, Jovanovic, & Perry, 1998).

**Move up, Move back:** A tool for group conversations that allows for a greater variety of voices to be heard. It is common for groups to be dominated by one or a few voices (often voices that intersect with privileged statuses as white, male, etc.). These voices are encouraged to MOVE BACK. This doesn't mean that they shouldn't speak at all, but rather be conscious of how much space they are taking up. On the other side of the spectrum are folks who don't often speak up-often as a result of simply not being given the space to do so. These folks are encouraged to MOVE UP and share their ideas. Resources: Thanks to Audrey Moore, Indiana Forest Alliance

**Blogs:** This tool provides a place for conversation outside of the classroom for students are uncomfortable speaking in class. A collection of posts...short, informal, sometimes controversial, and sometimes deeply personal...with the freshest information at the top. Resources: *We Blog: Publishing Online with Weblogs* (Blausch, Haughey, and Hourihan, 2002)

ConcepTest: This technique gives instructors quick feedback from all students in class on students' understanding of course concepts. Students answer a multiple choice question posed by the instructor in class by show of hands or on colored cards. This question focuses on a single concept, can't be solved by an equation, and is intermediate in difficulty. Students then raise their hand for their answer choice. If all students are in agreement, then the instructor knows to move on with the material. If there is disagreement about the correct responses, the instructor knows to spend more time with the concept. The technique can be followed up with a think-pair-share in which students talk to their neighbor about why they think the answer they gave is correct. The instructor can then ask for another show of hands to see how peer instruction changed students' responses.

Resources: mazur-www.harvard.edu/research/detailspage.php?ed=1&rowid=8

**Participation Reflection:** Students write a series of short papers (1-2 pages) which aim to make them more aware of classroom interaction generally and their contribution to it specifically. They would write the papers in response to prompts about their own participation skills, observation of participation in this class and other classes, the role of participation in learning, and how their ideas about participation have changed across these assignments. Resources: Weimer, M.E. <a href="http://www.facultyfocus.com/articles/teaching-professor-blog/grading-participation-an-alternative-to-talking-for-points/">http://www.facultyfocus.com/articles/teaching-professor-blog/grading-participation-an-alternative-to-talking-for-points/</a>