Controversial Issues as Brain-Based Learning
Andrew Guest—Social and Behavioral Sciences (March, 2006)

In my General Psychology sections we spend five class days engaged in "Controversial Issues Discourse" (CID's) regarding contemporary issues confronting psychologists. These are basically debates, but I don't like to call it that because of the contentious implications. In some ways I consider it like the Harvard Business School case study approach – meaning that there are many general principals about psychology that can be addressed through the examples of specific issues. Further, there are several text book series that cater to this approach for a wide variety of disciplines, including the McGraw-Hill Learning *Taking Sides* series (for which I recently produced *Taking Sides: Clashing Views in Lifespan Development*). All of this also means that the CID's were not designed with "brain-based" learning in mind; instead they were designed for four main reasons:

1) The CID's address important principles of psychology, thus demonstrating the relevance of psychological research.
2) The CID's are engaging—in all my classes I feel compelled to try and get students excited about learning more on their own and connecting the course with information out "in the world" (eg, in the news, or in their own dorm room discussions).
3) The CID's exhibit an important principle of social science—that intelligent people can have opposing views, yet the accumulated knowledge base still offers useful and important principles for understanding behavior.
4) The CID's expose the importance of evidence, rather than opinion or belief, in social science.

A key to CID class meetings is that every student is involved. Two groups of four students lead the discussion, but all the rest of the students must read the materials and come to class with an initial position on the issue, along with two questions they could ask to further discuss challenging aspects of the issue. On my syllabi I give the students this brief summary (followed later in the course by a more extensive explanation of the actual CID process):

"Controversial Issues Discourse [CID] – During five class meetings groups of students will engage in a "reasoned discourse" (like a debate, but without the contentious connotations) about controversial issues in psychology. Within each CID two groups will have the primary responsibility for presenting arguments and evidence regarding each issue. All other students will read the articles assigned regarding the issue and will bring questions to class for the leading groups to address. After the discourse, all students will re-evaluate their position on the issue in writing and evaluate the outcome of the discourse. More information regarding this assignment will be provided as the CID dates approach."

As it turns out, after reading *The Art of Changing the Brain*, the CID's do seem to work well with principles of "brain-based" learning. In my reading of the book, several larger principles seem relevant:

1) There are four pillars of human learning: gathering, analyzing, creating, and acting that correspond with areas of activity in the brain.

The general design of the CID's includes these four pillars—the students have to gather and analyze information that makes sense, they need to create and enact an evidence based argument, and then they cycle back to the process of gathering and analyzing information.

2) Learning depends on existing brain networks (prior knowledge, experiences, and understandings).

The CID's that work well allow students to frame important issues in the field of psychology in relation to what is on their mind. As such, they often come up with examples and ideas that are more meaningful than those that I might offer when guessing at what would be relevant to them. For example, in a nature vs. nurture debate the students consistently discuss relevant examples that matter to them: Do adopted kids take on characteristics of the parents?; Are people homosexual by choice?; Why do identical twins (who have the exact same genetic material) turn out differently? In another example, one semester I tried having a discourse about whether a multiple intelligences model was more appropriate to understanding intelligence than an IQ model. That did not grab the students—it was too abstract. I changed the intelligence CID to the question of whether IQ predicts success, and that turned out quite motivating to discussion. Students are very interested in figuring out what matters for success.

3) Effective learning involves multiple systems—often meaning both knowledge and emotion.

Effectively integrating emotion and knowledge is challenging. Sometimes the CID's seem too emotional to produce effective learning. For example, one semester I tried a CID about whether early childhood memories of abuse can be reliable (which is a very controversial and contentious topic in psychology). The topic didn't engage the students like I thought it would—and my guess is that it might have been too emotionally risky. In contrast, a CID asking whether the divorce of parents harms children seems to be about right emotionally—it affects lots of them, and they feel strongly about it. They add both emotion and experience to an important question in developmental psychology about the influence of family changes.

4) Brain-based learning "suggests that much of what we consider "wrong" is just incomplete. We can add to it if we have the 'Art.'"

This is a bit of a hard one for me—there are things that are wrong, and it intuitively feels like good teaching can involve pointing out ways that students are wrong. At the same time, the CID days provide a way to frame what I might think of as "wrong" as simply incomplete. This seems to happen, for example, in a CID asking whether "multiple personalities disorder" is real. While most students are familiar with the idea of this disorder from the media, they have rarely been exposed to significant evidence suggesting the "disorder" is largely a myth. While I could just take class time telling them that "multiple personalities disorder" is questioned by most professionals, when students come to that realization on their own through reading, writing, and discussion they seem to get a broader lesson in ways that psychological disorders can be socially constructed. At the same time, some topics are so far outside their experience that they can't even consider it could be wrong. There is an important CID topic asking whether giving praise harms children. Many academics are questioning the empirical base of the "self-esteem" movement. Yet, during this discourse I found that students could not fathom the possibility that it is possible to give "too much" praise.

So, in the end, I still do not entirely know how to effectively "change the brain" without challenging students' cherished self-esteem. But I do know that setting up a structure for class in which they read, write, talk, and think through a combination of their own experiences and evidence from the academic discipline at hand has the potential to create a valuable learning environment.