

Postdoc Academic Chat #7

Teaching and Learning Styles – What it Means for You as a New Professor

Friday, April 13, 2012

M-112, Medical Center, Always Building

(ground floor, on the Dean's courtyard; [Map](#))

Questions/Discussion Items to Consider

1. What do you consider to be your primary learning styles?
2. What teaching style do you consider the most challenging for you to undertake?
3. What are some of the things you can do now to prepare yourself to use various teaching styles once you start as a professor?

Readings

#1. Learning Styles

#2. Teaching and Learning Styles - The Cultural Context

#3. Teach to Students' Learning Styles

1 Learning Styles

A lot of attention has been given in recent years to student learning styles, how they may differ from faculty teaching styles, and what to do about such differences. The excerpt below is a brief look at this issue written primarily for beginning faculty. It is from: *The Adjunct Professor's Guide to Success: Surviving and Thriving in the College Classroom*, Chapter 4 - Today's Undergraduate Students, pp. 41-42. By Richard E. Lyons, Marcella L. Kysilka, and George E. Pawlas, Allyn & Bacon, A Viacom Company, Needham Heights, MA. Copyright ©1999 Allyn & Bacon, reprinted with permission.

In recent years, mountains of data have been gathered to help educators more conclusively understand how students learn. Presenting a great deal of that information at this stage in your development as an instructor would probably be counterproductive, but a sample might provide insight to aid you in your initial teaching assignment.

One of the most interesting efforts, commonly referred to as "brain-based" research, seeks to understand learning from the perspective of where and how certain types of information are processed. It suggests there are two major types of learners - those in whom the "right brain" is dominant, and those with a dominant "left brain." Right-brained

learners tend to be intuitive, imaginative, and impulsive; they prefer to start with a broad idea and then pursue supporting information. They learn best by seeing and doing in an informal, busy, and somewhat unstructured environment. On the other hand, left-brain learners tend to be analytical, rational, and objective; they prefer putting together many facts to arrive at a general understanding.

Right-brain learners prefer group discussions, simulations, panels, and other activity-based learning, whereas left-brain learners prefer traditional lectures, demonstrations, and assigned readings. Although there are many exceptions, females tend to be right-brain dominant, while males tend to be left-brain dominant. The traditional lecture/demonstration approach is typically more effective with male learners rather than female students. At the same time, research indicates females are more effective in utilizing left-brain approaches than men are in utilizing right-brain approaches, and that females are more successful in transitioning from left-brain to right-brain approaches, and vice versa than males are.

Another view of learning styles categorizes learners by the types of activities from which they derive the greatest payoff. It yields "tactile learners," who respond to physical objects that can be handled while studies; "visual Learners," who facilitate their learning through use of charts, maps, and graphs, "auditory learners," who respond more effectively to the spoken rather than the written word, and others.

In this and other discussions related to teaching styles, the enlightened instructor probably will ask which of two major strategies is most effective. That is, should the professor initially adapt to the preferred learning styles of students or expect students to first adapt to his or her preferred methods? It is a highly complex issue with no instant answers. Each situation requires some study and individualized decisions to arrive at the "best" approach. Some professors can flex themselves quite effectively to the learning styles of students, while others would lose so much confidence in themselves in trying to do so that they might become totally ineffective in the classroom.

Having said all of this, remember that each student in front of you is in many ways unique. While it is useful to make yourself aware of the wide variety of issues impacting students today, there is risk in ever assuming you have heard or seen enough. Get to know each one of your students as well as you can, first by speaking with each one in the initial class, then asking each to complete the "Student Profile" form, located in Appendix 6-1.

Later, build an ongoing dialogue with diverse students that will markedly increase your insights and create an accessibility to you in the students' minds that will markedly improve their motivation, attention levels, and understanding of your perspective. One of the greatest rewards of teaching is allowing yourself to be sufficiently vulnerable that you empower students to share more of themselves with you and their peers than might at times be comfortable. It is critical that you regularly assess your values and predispositions, talk with veteran instructors from whose experiences you can learn, and reflect upon your teaching experiences.

#2. Teaching and Learning Styles - The Cultural Context

The posting below looks at some of the role cultural context plays in developing and using various teaching and learning styles. It is from Chapter 7, Teaching, Testing, and Measuring Intelligence, Uncovering the Evidence That Cultural Context is Important, in Beyond Affirmative Action Reframing the Context of Higher Education, by Robert A. Ibarra. The University of Wisconsin Press, 2537 Daniels Street, Madison, Wisconsin 53718. Copyright ©2001 The Board of Regents of the University of Wisconsin System. All rights reserved. Reprinted with permission.

TEACHING AND LEARNING STYLES

Uncovering the Evidence That Cultural Context is Important

Teaching is so fundamental to academics that we scarcely think about it. That, unfortunately, is also a fundamental flaw in training graduate students. Traditionally, learning from the "master" meant acquiring knowledge, learning research analysis and methodologies, and - if the graduate student is lucky-perhaps trying to teach if a teaching assistantship is available. In the past this experience did not necessarily come with training or guidance, for learning to teach relied mainly upon knowing the academic discipline well. Today higher education is beginning to realize that knowing something well is simply not enough to teach it effectively. Thus graduate student programs, such as Preparing Future Faculty (PFF), sponsored by the Association of American Colleges and Universities and the Council of Graduate Schools, are being offered and are growing in both size and popularity at various graduate schools throughout the country. Long overdue, these programs are immensely important for recontextualizing academia. One goal is to change the pedagogy of teaching to match institutional types (i.e., two-year community colleges or four-year liberal arts schools) and thereby change academic culture. PFF programs can focus on the contrasts and "cultural gaps" encountered by junior faculty in both teaching and learning styles. Doing so reveals clues to what those differences in cultural context and cognition are.

Galloway (1996), perhaps unintentionally, effectively demonstrated some of these pedagogical differences in the published proceedings of recent PFF symposium held for graduate students at Howard University. In her symposium presentation, "Coping with Cultural Differences in the Learning Process," Irelene Ricks, an African American graduate student in political science, commented on unexpected teaching situations she has encountered:

What I began to discern with growing unease was a cultural difference in how the students engaged in the learning process. Simply put, they were quiet, too quiet to my way of thinking. They were respectful and dutiful, but inactive participants. I like open exchange - I am an interactive person, so I found myself developing little strategies to draw them out (group presentations, debates) with little success. What this meant was that I had to modify my teaching style to fit their learning style-something I was unable to do easily. Somehow we completed the semester with both teacher and students trying to

adjust (Galloway 1996, 34)

PFF students learn to teach in different types of colleges and to students from a variety of ethnic groups, and Ricks does not tell us what the different cultural backgrounds of her students were. She just thought they were too quiet and inactive. Regardless, Ricks has clear preferences for a more high-context teaching style-interactive, collaborative, group-oriented learning activities- and for students who are more active in the classroom, a learning style that researchers have found typical of African Americans (see also Brice-Heath 1983). Though one could argue this also could be a difference in the teaching styles and expectations at small colleges versus large universities, for African Americans something more may be involved. Confirming that African American schoolchildren tend to be cognitively field sensitive and highly interactive learners, Shade suggests that "the group consciousness, cooperation, sociocentric, and affective orientation that seems to underlie Afro-American culture has an effect on learning" as well (1982, 238). Chambers, Lewis, and Kerezsi (1995) reiterate the difficulties minority faculty encounter when teaching majority college students in this country. Evoking the findings of Rosalie Cohen (1969) and Hall (1976, 1984), among others, Chambers, Lewis, and Kerezsi point out that at all levels of education in the United States the predominant analytical style is that of the middle-class majority populations (1995, 48). They have found that conflicts between cultural context and cognition make faculty less effective and can generate negative racial attitudes among students.

What Ricks is saying also points to another strategic mandate for high-context minority faculty- adapt to the culture of the students and abandon and attempt to transform them to your cultural teaching perspectives. This is an uneasy lesson that minority faculty soon learn, revealed in Rick's parting advice to others: "Don't try to change the culture-it isn't broken and you don't need to fix it" (Galloway 1996, 35).

Clearly, preparing graduate students for teaching requires more than preparing them to deal with different institutional settings and students; it requires crafting a training program that prepares them for different learning and teaching styles from many gender and ethnic perspectives-a veritable array of pedagogies. Because such training is probably the least developed component of higher education, programs like PFF are few. The American Association for Higher Education (AAHE) in Washington, D.C., is dedicated to advancing college-level teaching and learning programs. Historically, AAHE has fostered new initiatives for learning more about what constitutes a learning-centered campus. The initiatives are not only innovative but aimed at reforming higher education in general (see E. Anderson 1993; Edgerton, Hutchings, and Quinlan 1991; Lambert and Tice 1993). Within a variety of new ideas on teaching and assessment, some, like peer collaboration and review teaching (Hutchings 1996), are even headed in the direction of accommodating high-context learners.

But even the mixture of programs and goals at AAHE appears to be missing major ingredients in the recipe for enhancing faculty and student success-how cultural background affects teaching and learning. AAHE's programs never even mention ethnic cultures, context, or cognition. The organization is not alone in this omission, for other

organizations that work to improve college teaching also do not incorporate these concepts in their programs.

This omission is not, however, the result of insufficient research on diversity and teaching/learning styles. In fact, quite a few scholars and teachers have incorporated and developed pedagogical models centered around the diverse learning styles of college students (see M. Adams 1992; Schmeck 1988; Tobias 1990). The problem is centered around the compartmentalization, fragmented, somewhat low-context approach used to institute cultural change by using these teaching and learning models.

Let me explain. A small portion of organizational initiatives and related literature on the topic acknowledges the importance of multicultural research and researchers (J. Anderson 1997; J. Anderson and Adams 1992; M. Ramirez 1991; M. Ramirez and Castaneda 1974). Felder (1993) and Felder and Silverman (1998), for example, have developed some very promising models that, although they may not highlight ethnic or gender diversity, incorporate college students' learning styles so inclusively that the models closely match the needs of all high- and low- context and field-sensitive and -independent students simultaneously.

The remarkable feature of Felder's "multistyle" approach is that it was created for teaching science, specifically, his (inherently low-context) chemistry and engineering courses. The problem, however, is that many organizational efforts, and much of the research on pedagogy mentioned earlier, fail to adequately address the core issue-how to change all, not just a few, of the components of academic organizational cultures. This means doing more than simply adding multicultural ideas piecemeal to a curriculum or to the pedagogy of teaching as if they were stand-alone components; it means changing them systematically and synchronously along with other components within the infrastructure of institutional culture itself. That is not an easy task.

Yet in a variety of ways educators can sense when the style of academic cultural systems is causing students to disconnect. Lani Guinier senses a disconnect between teaching and learning that unfairly discriminates against female students, especially in law school. Challenged because of her supposedly controversial views on minority voting rights after she was nominated to head the civil rights division of the Justice Department in 1993, Guinier is now challenging the traditional Socratic teaching style in law school classrooms (Mangan 1997). Her views reflect the same concerns evident when high-context Latinos and Latinas are subjected to learning in predominately low-context educational environments. Hall (1977, 106-8) describes legal procedures and trial law in the United States as an illustration of how law has been overadapted to a low-context culture.

The importance of Guinier's book, *Becoming Gentlemen: Women, Law School, and Institutional Change* (1997), is that she not only understands the problem but provides a way to create a more inclusive learning environment for women and ethnic minorities. Although her intent is to change the learning process, she appears to be suggesting a way of doing this that does not compromise the long heritage of legal education and training.

Her insights reach far beyond gender differences.

Guinier illustrates the multiple teaching styles that can reframe the context of academia. (Guinier, of course, is writing about women, but she says applies equally to men from high- context cultures.) She believes that women have difficulties in law school-more stress, lower grades, fewer honors than men-because the traditional Socratic method is designed to shape students into gladiator-like trial lawyers. In the classroom "a professor calls on students and asks them a series of questions about a court decision in order to extrapolate the underlying legal principles" (Mangan 1997, A12). The problem, Guinier finds, is that this method unnecessarily belittles and intimidates women in a combative, less-than-respectful atmosphere. Because the Socratic teaching method has become a deliberate one-on-one sparring match between student and professor, its advocates believe it is ideal for preparing students to deal with the unexpected. It also favors majority males, who are low context and more aggressive. "Women," Guinier argues, "generally learn better through cooperative approaches [which are high context] than through adversarial ones," which are low context, and in an atmosphere of respect (i.e., student centered and high context) (1997, A12). In her book she describes women who "participate only after listening to what others are saying. They see conversation as a way of collaborating to synthesize information, rather than competing to perform or win" (in Mangan 1997, A12). The Socratic method forces women, she says, to act like males; when they do, their self-esteem suffers.

In a brief description of Guinier's class Mangan tells us that Guinier has students sit in a semicircle, and she encourages students with a number of high-context techniques and methods (1997, A13). She asks them to build upon other students' comments, compiling and extending ideas in a collaborative process and tracking arguments through what appears to be a comprehensive (rather than linear) thought process. In effect, her approach fosters a more controversial process of social interaction. When challenges arise-and they do-they are between students and not professor versus student. In a traditional classroom students usually sit in an auditorium facing the professor, with little or no interaction among students. Guinier claims that this environment favors men and affects women (and men from high-context cultures) adversely because they are reluctant to volunteer (1997, A13). Moreover, high-context individuals take longer to adjust to and participate in a confrontational atmosphere.

#3. Teach to Students' Learning Styles

by Judie Haynes

It is especially important to take your students' learning styles into account when you are teaching English language learners. This article gives a brief description of each style and how you can teach to it.

It is always important for teachers to teach to their students' learning styles but this becomes crucial when teaching English language learners. ELLs may be highly literate in their own language but experience difficulties when acquiring English because they are

accustomed to learning through a different style. Most American teachers, especially in the upper grades, teach to students with an auditory learning style. This can be very difficult for the ELLs in your class.

Auditory Learners

Students with this style will be able to recall what they hear and will prefer oral instructions. They learn by listening and speaking. These students enjoy talking and interviewing. They are phonetic readers who enjoy oral reading, choral reading, and listening to recorded books. They learn best by doing the following:

- * interviewing, debating
- * participating on a panel
- * giving oral reports
- * participating in oral discussions of written material

Visual Learners

Visual learners will be able to recall what they see and will prefer written instructions. These students are sight readers who enjoy reading silently. Better yet, present information to them with a video. They will learn by observing and enjoy working with the following:

- * computer graphics
- * maps, graphs, charts
- * cartoons
- * posters
- * diagrams
- * graphic organizers
- * text with a lot of pictures

Tactile Learners

Students with this strength learn best by touching. They understand directions that they write and will learn best through manipulatives. Try using the Language Experience Approach (LEA) when teaching these students to read. These students will also benefit from whole language approaches to reading. They'll learn best by :

- * drawing
- * playing board games
- * making dioramas
- * making models
- * following instructions to make something

Kinesthetic Learners

Kinesthetic learners also learn by touching or manipulating objects. They need to involve

their whole body in learning. Total Physical Response is a good ESL method for them. They remember material best if they act it out. These students learn best by:

- * playing games that involve their whole body
- * movement activities
- * making models
- * following instructions to make something
- * setting up experiments

Global Learners

Global learners are spontaneous and intuitive. They do not like to be bored. Information needs to be presented in an interesting manner using attractive materials. Cooperative learning strategies and holistic reading methods work well with these learners. Global learners learn best through:

- * choral reading
- * recorded books
- * story writing
- * computer programs
- * games
- * group activities

Analytic

Analytic learners plan and organize their work. They focus on details and are logical. They are readers and prefer to work individually on activity sheets. They learn best when:

- * information is presented in sequential steps
- * lessons are structured and teacher-directed
- * goals are clear
- * requirements are spelled out.