

The Power of Peer Mentoring

Peer Mentoring Resource Booklet

for

Student Assistant Mentors of EOP Central

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Some of the best mentors of students in our universities are other students. I repeat this statement: Some of the best mentors of students in our universities are other students.

But how can this be? After all, in universities aren't mentors supposed to be older adult professionals, such as faculty and counselors? How can a student serve as an effective mentor for another student?

Consider this: For a new student, a university can be an exciting but also intimidating place. A university can also be a lonely place for a new student, especially if that student is the first in their family to go to college, the child of immigrant parents, or a member of a minority community. Even simple things that experienced students take for granted can be challenging for a new student, such as finding classrooms and offices on campus, understanding school policies for registration for classes, and learning the special language of the university such as "syllabus," "office hours," "annotations," and "prerequisites." A small number of new students learn the answers by directly asking professors in their classes or talking to university professional staff. But many, many students find out information by asking friends, especially more experienced students. In fact, most new students find their way to the offices of university staff and professors by first talking to more experienced students. In other words, the experienced students serve as guides for new students to help them access the storehouse of knowledge and resources at the university. Moreover, new students will continue to seek the advice of experienced students regarding decisions about classes, majors, academic difficulties, and personal problems.

A mentor is defined as a knowledgeable and experienced guide, a trusted ally and advocate, and a caring role model. An effective mentor is respectful, reliable, patient, trustworthy, and a very good listener and communicator. In a university, mentors can be found among faculty and professional staff. But mentors can also be found in the ranks of students themselves. Student mentors are known as Peer Mentors. Due to their close association with other students, Peer Mentors are very important. Often new students confronted with an academic or personal problem will seek out advice first from a Peer Mentor and only with encouragement will that student contact others in the university, such as counselors, faculty, or administrators.

Based on an informal survey at California State University, Northridge (CSUN), EOP Director José Luis Vargas found that **the single most important factor associated with high retention and graduation rates for low-income, first-generation college students was their ability to find a mentor at CSUN.**

Finding a mentor not only helped students to succeed academically but also with career planning and the development of life management skills such as dealing with personal and family problems.

But finding a mentor at a big university is not easy, especially for a student who is a first-generation college student. Thus, at universities that have made a commitment to helping students, programs have been set up for peer advising and tutoring to promote opportunities for experienced students to serve as mentors for new students. However, in these programs all experienced students are not Peer Mentors. Some simply see advising and tutoring as a job and interact with students coming to see them like junior bureaucrats. Peer Mentors are those who understand their interactions with students as not simply a job but as opportunities **to help others discover the potential within themselves to succeed in the university and in life.** Peer Mentors help to nurture this potential in other students. In other words, what distinguishes Peer Mentors from other students who do advising and tutoring is not the amount of work they do but *the quality and kind of work* they do. **To become a Peer Mentor, an experienced student does not have to do extra work but to think about their interactions with fellow students in a new way.** Peer Mentors bring to their work as advisors and tutors the consciousness of the importance of mentoring.

The following sections of this booklet cover ways that experienced students can train themselves to become Peer Mentors by developing consciousness about their important role in working with fellow students, especially first-generation college students.

Mentoring as the “Giving and Receiving of Wisdom”

- *Learning How to “Mentor on the Run” at CSUN*
 - *Building a Community of Mentors at CSUN*
 - *Promoting a Culture of Mentoring at CSUN*

When we hear the word mentoring, most of us create the following image in our minds: that of an old sage (almost always male and white with long hair and often a flowing beard) sitting for hours in a secluded space and providing advice to a young person. Of course, in the real world, mentors come from all races of people, are both young and old, female as well as male, and have hair or no hair. However, the popular and dominant image of a mentor helps us to become more aware of an even deeper stereotype we have of mentoring. We tend to define mentoring around “big moments.” Specifically, we conceptualize mentoring as one-to-one, long-term relationships involving a wizened sage transferring wisdom to a single disciple in magical moments created over long periods of interaction. In reality, mentors in our lives can be sages, but they are more likely “ordinary” people all around us. In the real world, mentoring is reciprocal and not one-way — i.e., mentoring involves an interactive process in which both the mentor and mentee benefit. Also, in the real world, mentoring is more than an isolated relationship of two individuals; most mentoring occurs in a web of relationships with others (i.e., within a community). And, perhaps most important, mentoring in the real world occurs not only in “big moments” but mainly in “little moments” — i.e., as part of our daily interactions with others. Nevertheless, our understanding of mentoring is often limited by the stereotype of what we believe it to be.

In their small book, *Mentoring: The Tao of Giving and Receiving Wisdom*, Chungliang Al Huang and Jerry Lynch remind us about the mentoring opportunities that are always all around us. They define mentoring as “the giving and receiving of wisdom” within a web of relationships. Through the interactions that mentors have with others, they share the “gift of wisdom and [have] it graciously appreciated and received by others who then carry the gift to all those

within their sphere of influence.” Mentoring, Huang and Lynch further emphasize, occurs within a community, and mentoring activities help to promote a culture of wisdom throughout this community.

According to Huang and Lynch’s expanded understanding of mentoring, each of us daily has many opportunities to serve as both a mentor and mentee with those around us. Yes, mentoring does occur in special “big moments” — those built up through relationships with a few individuals that we have worked with intensely for years — but we need to more fully recognize that most of the most powerful acts of mentoring happen during “little moments.” The “little moments” occur in our day-to-day interactions with others all around us. But to capture the potential contained in these “little moments,” we need to expand our consciousness and overcome our stereotype that mentoring consists of “big moments.”

How can this new understanding of mentoring help us at this time at CSUN? Currently, most of us feel besieged by many impersonal forces: massive budget cutbacks, increasing student fees, and uncertainty about the future. Politicians and CSU officials want faculty and students to accomplish more with fewer resources. In the midst of this turbulence, we frequently hear students and faculty talk about the need for a greater sense of community on our campus, better communication, and more opportunities for interactions. Students want faculty and other campus mentors who not only can help them advance academically but who can understand them as people. This sentiment is keenly felt by students from immigrant backgrounds and by other students who are the first generation in their families attending college. Meanwhile, many potential mentors on our campus feel they have no time to do so.

If there were ever a time to emphasize mentoring at CSUN, now is the time. Of course, the concept of mentoring by itself cannot solve all the major challenges facing our campus, whether these be responding to budget shortfalls, accelerating student graduation rates, or promoting educational equity and diversity. However, an emphasis on mentoring — or more specifically, the creation of a “culture of mentoring” at CSUN — could help to create the conditions necessary to unleash the creativity and energy of students, staff, faculty, and administrators across our campus.

Still, the persistent stereotype that mentoring consists only of “big moments” holds us back from advancing and seeing all the potential “little moments” of mentoring surrounding us.

More than a decade ago, following a series of campus townhall meetings, Dr. Gordon Nakagawa coined the concept of “mentoring on the run” to capture the “little moments” of mentoring already happening on our campus. These “little moments” are embedded in the work of some faculty, staff, and student peer mentors who consciously use each interaction with others on our campus as a mentoring opportunity. Countering the widespread belief that mentoring at a large, commuter campus can only impact a handful of students, Dr. Nakagawa found faculty who had embedded “little moments” of mentoring in their classroom instruction and their informal interactions with students outside the classroom. He found professional staff who had infused mentoring into their work as helpers of students. He found student peer mentors who adeptly helped fellow students access campus resources and maneuver through the bureaucratic maze of the university.

During the past decade, the Faculty Mentor Program has strategically focused on increasing awareness about the power of these “little moments” of mentoring and training faculty, staff, and student peer mentors in this approach. We believe that “mentoring on the run” — rather than representing a stunted or limited form of mentoring — is an advanced form of mentoring that is ideally suited to our large, commuter campus. Moreover, because so much of the existing research on the importance of mentoring focuses on the “big moments,” we at CSUN can greatly contribute to the mentoring literature by developing insight into the power of the “little moments.” Thus, our current efforts to advance understanding of “mentoring on the run” here at CSUN may have implications far beyond our campus.

As we develop our capacity to “mentor on the run,” we will be able to change the deeply ingrained image of mentoring within our minds. Gradually, a new image will take shape — one that is rooted in the reality of the little mentoring moments and the “giving and receiving wisdom” in our daily interactions with others. This new image will not only center on the power of “little moments” of mentoring but the importance of building a “community of mentors” here at CSUN and promoting a “culture of mentoring” on our campus. We can all be part of this change.

You're Serving as a Peer Mentor When . . .

You help your students achieve the potential within themselves that is hidden to others — and perhaps even to the students themselves.

You share stories with students about your own educational career and the ways you overcame obstacles similar to theirs.

You help students overcome their fear of a professor and help them to ask questions in a class or visit the professor during office hours.

You show a student how you learned time management to do well in your classes.

You listen to a student describe a personal problem and explore resources at the university to deal with the problem.

You help a new student understand a particularly tough bureaucratic rule or procedure — and you explain it in a way that the student is willing to come back to you to learn about other difficult regulations.

You help a new student understand how to use resources at the university, such as the Learning Resource Center or the Advising Resource Center/EOP.

You know more about a student's academic performance than what they tell you.

Please add your own insights:

Misconceptions about Mentoring

Misconception: In a university, you need to be an older person with gray hair (or no hair) to be a good mentor.

Reality: In a university, mentors can be young or old. Some of the most outstanding mentors of students are fellow students, or Peer Mentors.

Misconception: Mentoring only happens one-to-one on a long-term basis.

Reality: At a big university, mentoring occurs in many different ways. Some mentoring relationships are traditional relationships involving a one-to-one setting over a long period of time. But effective mentoring can also occur in a group setting or even through a single encounter with a student. Dr. Gordon Nakagawa urges all of us to see each interaction with students as an opportunity for mentoring and to think about ways to infuse mentoring into our daily work as advisors, tutors and student assistants.

Misconception: Mentoring programs at universities only are for high-achieving students, especially those who are on their way to grad school.

Reality: All college students need mentors, but according to research faculty in universities spend most of their time working with high-achieving students. In the late 1960s, students and community activists created programs like EOP to open opportunities in higher education for low-income, first-generation college students and to provide students with necessary support services such as mentoring to help them succeed academically and serve their communities. Thus, central to the mission of EOP is the practice of mentoring and to ensure that the university meets this responsibility for all of its students.

Misconception: Only the person being mentored benefits from mentoring.

Reality: By definition, mentoring is a reciprocal relationship where both the mentor and mentee learn from each other. True mentors are those who have developed the wisdom to learn from those they mentor.

Misconception: Students who work as peer advisors, tutors and student assistants already have a lot of responsibilities and do not have the time to take on extra responsibilities relating to mentoring.

Reality: Mentoring is not a separate set of activities that are different from advising, tutoring or working as a student assistant in an office. Mentoring relates to consciousness about your work as an advisor, tutor or student

assistant. Without this consciousness, advisors, tutors and student assistants are perceived by fellow students as junior bureaucrats focusing on rules, regulations, and procedures. Universities don't need more bureaucrats. Universities do need people who are student-centered and who can see and nurture the potential in others.

Misconception: By calling yourself a “Peer Mentor,” you become a mentor.

Reality: Not all experienced students who work with fellow students as advisors or tutors are Peer Mentors, even if they have that job title. Peer Mentors are those who have developed consciousness about mentoring and in their interactions with fellow students demonstrate respect, patience, trustworthiness, and strong communication skills, especially listening skills.

Misconception: To become a mentor requires a lot of time and a lot of work.

Reality: Becoming a mentor requires a change in consciousness — i.e., how you think about yourself and how you think about others. Workshops and training sessions can help experienced students to develop this consciousness. Mentoring is not a matter of working harder or longer or adding to your job responsibilities but seeing your work differently.

Misconception: At a large university, one Peer Mentor can help only a limited number of students. Although a Peer Mentor may want to help large numbers of students, the cold reality is that she or he can only work with a select few.

Reality: Each interaction with a student is a mentoring opportunity, even a single encounter with a student. The key is to develop consciousness about the importance of mentoring in your interactions with fellow students and to infuse this consciousness in your daily work as a tutor or advisor. Also, it's important for Peer Mentors to see themselves as part of a network of other mentors — as part of a Community of Mentors. To effectively help a particular student or a group of students, Peer Mentors can draw upon this network or community. Mentoring occurs in a community, not in isolation.

Developing a Mentoring Perspective

Mentor Roles and Responsibilities

What a Mentor Is . . .

By Dr. Gordon Nakagawa

Mentor roles and responsibilities are varied and complex. Serving as a guide, facilitator, role model, and/or ally to the mentee, a mentor must be prepared to take on a range of roles and responsibilities that may change as the mentor/mentee relationship develops over time, as the needs and goals of the mentee shift, and as specific contexts and situations require different strategies. Although it's not possible to pigeonhole any mentor, mentee, or mentoring relationship, a mentor will generally enact a number of common roles and responsibilities. It's worth emphasizing that whatever role the mentor may take, the mentor's principal goal, as Paulo Freire reminds us, is to invite and nurture the "total autonomy, freedom, and development of those he or she mentors."

A mentor is . . .

- **A knowledgeable and experienced guide** who teaches (and learns) through a commitment to the mutual growth of both mentee and mentor.
- **A caring, thoughtful, and humane facilitator** who provides access to people, places, experiences, and resources outside the mentee's routine environment.
- **A role model** who exemplifies in word and deed what it means to be an ethical, responsible, and compassionate human being.
- **A trusted ally, or advocate**, who works with (not for) the mentee and on behalf of the mentee's best interests and goals.

Developing a Mentoring Perspective

Mentor Roles and Responsibilities

What a Mentor Is Not

By Dr. Gordon Nakagawa

Mentors and mentees should understand that mentors cannot be all things to their mentees. A role model is not a flawless idol to be mindlessly emulated by the mentee; an experienced guide is not a surrogate parents who stands in as a mother or father figure; a caring facilitator is not a professional therapist who is capable of treating serious personal problems; a trusted ally or advocate is not a social worker or a financier. Often, mentors and mentees encounter problems in their relationships due to different ideas about the appropriate role(s) and responsibilities of either the mentor, mentee, or both. There are boundaries in virtually any and all relationships, and the mentor/mentee relationship is no exception. While there are no hard and fast rules, and while there may be rare exceptions, there are guidelines for what a mentor is (or should be) and for what a mentor is not (or should not be).

A mentor is *not* . . .

- **A (surrogate) parent.**
- **A professional counselor or therapist.**
- **A flawless or infallible idol.**
- **A social worker.**
- **A lending institution.**
- **A playmate or romantic partner.**

As a Peer Mentor, your principal objectives should be to:

1. Establish a positive, personal relationship with your mentee(s).

- Avoid acting as if you were nothing more than a professional service provider (“I’m here to do a job. I’m a tutor/peer advisor/student office assistant; I’m *not* here to be your friend!” Make a proactive effort to act as a guide, a “coach,” and an ally and advocate.
- Once a positive, personal relationship is developed, it is much easier to realize the remaining three goals.
- Trust and respect must be established.
- Regular interaction and consistent support are important in many mentoring relationships.

2. Help your mentee(s) to develop academic and life skills.

- Work to accomplish specific goals (e.g., tutoring assistance on a homework assignment or peer advising about the best use of “free” time).
- When and where appropriate, emphasize life-management skills, such as decision-making, goal setting, time management, dealing with conflict, values clarification, and skills for coping with stress and fear.

3. Assist mentee(s) in accessing academic and university resources.

- Provide information — or better yet, help your mentee(s) to find information — about academic resources (faculty, staff, academic support services, student organizations, etc.). Assist your mentee(s) in learning how to access and use these resources — don’t assume that just because they know where their professor’s office is that they also understand how to talk to their professor.

4. Enhance your mentee’s ability to interact comfortably and productively with people/groups from diverse racial, ethnic, cultural, and socioeconomic backgrounds.

- Your own willingness to interact with individuals and groups different from yourself will make a powerful statement about the value placed on diversity. Model the attitudes and behaviors that you emphasize.
- Contrary to popular belief, we are *not* “all the same.” It is important to acknowledge and understand, not ignore, our differences. We need to learn how to use our differences as resources for growth. Respecting our differences is necessary but not sufficient; we need to know how to negotiate our differences in ways that produce new understandings and insights.
- Everyone holds particular preconceptions and stereotypes about one’s own group and other groups. Take special care that you are not (intentionally or unintentionally) promoting your own views and values at the expense of your mentees’ viewpoints. Work at understanding and critically examining your own perspectives on race, ethnicity, culture, class, religion, sexual orientation, etc.

[Adapted from Mentor Training Curriculum, National Mentoring Working Group convened by United Way of America and One to One, 1991, in *One to One “Mentoring 101” Curriculum*, The California Mentoring Partnership.]

Developing a Mentoring Perspective

Mentor Roles and Responsibilities

A mentor should not . . . *

- Break promises.
 - Condone disrespectful or destructive behavior.
 - Talk down to a mentee.
 - Coerce the mentee into taking any action.
 - Exploit or take advantage of the mentee.
 - Be inconsistent.
 - Become a crutch.
 - Break confidentiality (except in cases of potential harm to the mentee or to other people).
- Adapted by Dr. Gordon Nakagawa from a handout distributed by David F. James, Mentoring Institute, "Diversity in Mentoring Conference," International Mentoring Association, Temple, AZ, April 3, 1997.

The Impact of Mentoring on Increasing Students' Academic Achievement

By Glenn Omatsu

What impact does mentoring have on student academic achievement? Why do universities that emphasize mentoring demonstrate higher student retention rates than those that do not?

One of the leading researchers on why students leave college is Vincent Tinto (see Vincent Tinto, *Leaving College: Rethinking the Causes and Cures of Student Attrition*, 2nd ed. (Chicago: University of Chicago Press, 1987 and 1993). Tinto's research also helps to identify critical factors underlying student persistence in college and academic success. In his analysis, Tinto moves beyond past research that has tended to over-emphasize individual student attributes; he examines instead factors relating to what we might be called "institutional culture" — i.e., the academic and social environment of each college, such as faculty-student interactions, student-student interactions, academic interactions in the classroom, the intellectual and social ethos outside the classroom, student support services, etc. Of course, all of these factors deal with mentoring relationships, both formal and informal relationships. In the following summary taken from Tinto's book, I focus on ideas relating to two concepts important for CSUN at this time: the relationship between mentoring and student academic success and the significance of learning communities (or "communities of mentors") for student persistence and achievement.

In his analysis of why students either leave college or persist to graduation, Tinto identifies the key role of faculty interactions and peer interactions and their impact on students. According to Tinto, "the faculty, more than any other group, represents the primary intellectual orientation of the institution. Their actions, within and without the classroom, provide the standards by which individuals come to judge the intellectual ethos of the institution. . . . The classrooms, the hallways, and the offices of the institution become testing grounds for student judgement as to the intellectual character and worth of the college experience" (p. 53). In addition, for students, interactions with their peers are particularly important in the decision to leave or stay in college. For students, "social identity is sometimes as important as intellectual identity, especially in the first year of college" (p. 53). For large, commuter campuses in urban areas, the impact of student contact with others is important for persistence for those students who are regarded as having "marginal" status on campus, such as "high-risk" students (p. 79). Overall, "the degree and quality of personal interaction with other members of the institution (whether with faculty or with peers) are critical elements" in students' decisions to either stay in or leave college (p. 56)

Tinto emphasizes that frequent contact with the faculty appears to be a particularly important element for high student persistence rates in colleges (p. 56). "This is especially true when that contact extends beyond the formal boundaries of the classroom to the various informal settings which characterize social life. Those encounters which go beyond the mere formalities of academic work to broader intellectual and social issues and which are seen by students as warm and rewarding appear to be strongly associated with the continued persistence" (p. 57). Moreover, faculty behavior within the classroom often serves as the "important precursors to

subsequent contact,” according to students. “Classroom behaviors influence student perceptions as to the receptivity of faculty to further student contacts outside the classroom” (p. 57). Thus, according to Tinto, “it is of little surprise to discover that institutions with low rates of student retention are those in which students generally report low rates of student-faculty contact” (p. 58).

Overall, Tinto concludes that student academic success and their intellectual and social development are greatest in those universities “where students interact with both faculty and student peers,” whether through formal or informal mentoring relationships (p. 70).

Tinto’s summary of educational research also highlights the importance of what we can call “communities of mentors” on student persistence and academic success. He emphasizes the role that “supportive relationships” play in “preventing and reducing the harmful effects of stress and enhancing individuals’ ability to cope effectively with stress in specific social settings” (p. 122). According to Tinto, “the establishment of supportive personal relationships — with faculty, peers, and other significant persons — enables students to better cope with the demands of the college environment,” and this, in turn, has positive impacts upon students’ academic success (p. 122). These research findings point to the importance of “collaborative effect of a variety of actors, faculty and staff alike, across the campus” (p. 122).

Tinto’s focus on the importance of collaborative efforts by faculty and staff to promote student success leads to his emphasis on conceptualizing colleges as “learning communities.” He identifies student involvement and integration in college life, especially through contact with faculty, as “a key determinant for a variety of educational outcomes” (pp. 130-131). This involvement and integration is related to the quality of students’ investment in their learning, which, in turn, is related to the amount that they learn. Thus, Tinto argues that faculty need to understand the importance of promoting student involvement in their classrooms through the creation of classroom learning communities (p. 131). Tinto further contends that the first several weeks of college for students are a very critical period. In this period, student social attachments (i.e., their capacity to involve themselves in learning communities) “may be a necessary precondition” for subsequent involvements at their institutions, including academic involvement (p. 134). In this initial period of adjustment to college life, Tinto emphasizes the importance of student contact with faculty, “specifically accessibility and contact with faculty outside classrooms, helpfulness of faculty, and the concern they show for students” (p. 135). According to Tinto, “once social membership has been achieved or at least once concerns over it have been addressed, student attention appears to increasingly center on academic involvements” (p. 134). In short, Tinto advocates for designing students’ first-year college experience around learning communities and mentoring relationships, especially with faculty.

Works cited by Tinto:

Astin, A. W., *Preventing Students from Dropping Out* (San Francisco: Jossey-Bass, 1975).

Astin, A. W., *What Matters in College: Four Critical Years Revisited* (San Francisco: Jossey-Bass, 1993).

- Attinasi, L. C., Jr., "Getting In: Mexican Americans' Perceptions of University Attendance and the Implications for Freshman Year Persistence," *Journal of Higher Education* 60 (1989): 247-277.
- Boyer, E. L., *College: The Undergraduate Experience in America* (New York: Harper and Row, 1987).
- Cosgrove, T. J., "The Effects of Participation in a Mentoring-Transcript Program on Freshmen," *Journal of College Student Personnel* 27 (1986):119-124.
- Endo, J. J. and R. L. Harpel, "The Effect of Student-Faculty Interaction on Students' Educational Outcomes," *Research in Higher Education* 16 (1982): 115-135.
- Friedlander, J., *The Importance of Quality of Effort in Predicting College Student Attainment*, Ph.D. dissertation, University of California, Los Angeles, 1980.
- Goodsell, A., M. Maher, and V. Tinto, *Collaborative Learning: A Sourcebook for Higher Education* (University Park: National Center on Postsecondary Teaching, learning, and Assessment, 1992).
- House, J. S., *Work Stress and Social Support* (Reading: Addison-Wesley, 1981).
- Jacobi, M., "Mentoring and Undergraduate Academic Success: A Literature Review," *Review of Educational Research* 6 (1991):505-532.
- Kaufman, M. A. and D. G. Creamer, "Influences of Student Goals for College on Freshman Year Quality of Effect and Growth," *Journal of College Student Development* 32 (1991): 197-206.
- McCarthy, M. E., G. M. Pretty, and V. Catano, "Psychological Sense of Community and Student Burnout," *Journal of College Student Development* 31 (1990): 211-216.
- Merriam, S. B., T. K. Thomas, and C. P. Zeph, "Mentoring in Higher Education: What We Know Now," *The Review of Higher Education* 11 (1987):199-210.
- Moffatt, M., *Coming of Age in New Jersey: College and American Culture* (New Brunswick, NJ: Rutgers University Press, 1989).
- Neumann, W., "Persistence in the Community College: The Student Perspective," Ph.D. dissertation, Syracuse University, 1985.
- Neumann, Y. and E. F. Neumann, "Predicting Juniors' and Seniors' Persistence and Attrition: A Quality of Learning Experience Approach," *The Journal of Experimental Education* 57 (1989): 129-140.
- Ory, J. C. and L. A. Braskamp, "Involvement and Growth of Students in Three Academic Programs," *Research in Higher Education* 28 (1988):116-129.
- Ostrow, E., S. Paul, V. Dark, and J. Berhman, "Adjustment of Women on Campus: Effects of Stressful Life Events, Social Support, and Personal Competencies," in S. E. Hobfoll, ed., *Stress, Social Support, and Women* (Washington, D.C.: Hemisphere, 1986).
- Pace, C. R., *Measuring the Quality of College Student Experience* (Los Angeles: University of California, Higher Education Research Institute, 1984).

- Parker, J. and J. Schmidt, "Effects of College Experience," in H. Mitzel, ed., *Encyclopedia of Educational Research*, 5th ed. (New York: Free Press, 1982).
- Pascarella, E. T., "Student-Faculty Informal Contact and College Outcomes," *Review of Educational Research* 50 (1980):545-595.
- Pascarella, E. T., "College Environmental Influences on Learning and Cognitive Development: Critical Review and Synthesis," in *Higher Education: Handbook of Theory and Research*, vol. 1, edited by J. Smart (New York: Agathon Press, 1985).
- Pascarella, E. T. and P. T. Terenzini, "Patterns of Student-Faculty Informal Interaction beyond the Classroom and Voluntary Freshman Attrition," *Journal of Higher Education* 5 (1977):540-552.
- Pascarella, E. t., and P. T. Terenzini, *How College Affects Students* (San Francisco: Jossey-Bass, 1991).
- Pascarella, E. T., P. T. Terenzini, and J. Hibel, "Student Faculty Interactional Settings and Their Relationship to Predicted Academic Performance," *Journal of Higher Education* 49 (1985):450-463.
- Pearson, R. E., *Counselling and Social Support: Perspectives and Practices* (Newbury Park, CA: Sage, 1990).
- Stage, F., "Reciprocal Effects between the Academic and Social Integration of College Students," *Research in Higher Education* 30 (1989):517-530.
- Stoecker, J., E. T. Pascarella, and L. Wolfle, "Persistence in Higher Education: A Nine-Year Test of a Theoretical Model," *Journal of College Student Development* 29 (1988):196-209.
- Terenzini, P. T. and T. Wright, "Influence on Students' Academic Growth during Four Years of College," *Research in Higher Education* 26 (1987):161-179.
- Terenzini, P. T. and T. Wright, "Students' Personal Growth during the First Two years of College," *Review of Higher Education* 10 (1987):259-271.
- Tinto, V., A. Goodsell, and P. Russo, "Gaining a Voice: The Impact of Collaborative Learning on Student Experience in the First Year of College," unpublished manuscript, Syracuse University, Syracuse, New York, 1993.
- Valadez, J. R. and R. P. Duran, "Mentoring in Higher Education," paper presented at the annual meeting of the American Educational Research Association, Chicago, 1991.
- Wilson, R., J. Gaff, R. Dienst, L. Wood, and J. Bavry, *College Professors and Their Impact on Students* (New York: Wiley-Interscience, 1975).
- Wilson, R., L. Wood, and J. Gaff, "Social-Psychological Accessibility and Faculty-Student Interactions beyond the Classroom," *Sociology of Education* 1 (1974):74-92.

Developing a Mentoring Perspective

Who Are Our Mentors?

Directions: [1] Write the names of any and all individuals who have served as mentors in your life; [2] circle the name of *one* person who has been especially important or influential in your academic and/or personal growth; [3] identify one or two characteristics that describe your mentor(s).

Who?

Characteristics?

Based on your description of mentors and their characteristics, think about the *process of mentoring*. What does it mean to say that we are engaged in a “mentoring” relationship? What do mentors do in practice?

Mentoring and Communication

Developing Observation Skills

Here is an interesting and true story about two peer mentors. Both peer mentors go to the same freshman class for the first time. The professor in this class does not ask them to say or do anything but only to observe. After the class session is over, the professor asks each peer mentor to tell her what they learned. Peer Mentor A answers that she didn't learn anything because she didn't say or do anything in class. In contrast, Peer Mentor B quickly describes ten valuable things she learned.

What is the difference between Peer Mentor A and Peer Mentor B? Why did Peer Mentor B learn so much, while Peer Mentor A learned nothing?

What are ten possible things that Peer Mentor B learned from visiting the freshman class for the first time — even though she didn't say or do anything in class that day?

By visiting this class one time, what observations did Peer Mentor B make that could help her answer the following important questions?

Which students in this class are “good” students, and which could be in danger of failing?

What “small things” can a peer mentor observe that can be used quickly to identify which students most need the help of a mentor?

What “small things” can a peer mentor observe about each individual student that can be used to develop a strategy to help each individual student?

Mentoring and Communication

Seeing Yourself from the Perspective of Students in Your Class

Students in your assigned class will learn from you about what a peer mentor does – not by what you tell them about peer mentors but by what you do. They will especially learn by small things that you do (or don't do). This short exercise will help you understand how students perceived you in the first day (or week) of classes just by observing small things that you did or didn't do. Based on your first day (or first week) in your assigned class, quickly answer the following questions from the perspective of students.

I arrived to my assigned class:

- a few minutes early
- right on time
- a little bit late

When I first sat down in the class,

- I smiled and said hello to a few students.
- I went to talk to the professor or another peer mentor and then sat down when class began
- I don't remember

When the professor introduced me as a peer mentor, I spoke in front of the class and

- smiled and told the students I want to help them do well
- talked mainly about myself and how students can learn a lot from me

When the professor was lecturing, I did the following (check all that apply):

- listened attentively
- took some notes
- started to memorize some names of students in the class
- observed how other students were listening
- looked carefully around the room like a narc or Secret Service agent
- worked quietly on my homework from other classes
- caught up with email on my laptop
- yawned because I was sleepy
- fidgeted in my chair

When class ended, I

- immediately left to go to my other class
- spent a little bit of time greeting students and smiling, even though they didn't talk to me
- went immediately to the professor or other peer mentor in the class to ask questions

Overall, how do you think students perceived you?

- As someone who is friendly and wants to help students in the class
- As someone who is friendly and wants to help the professor
- As someone who is friendly but also nervous
- As someone who is a high-achieving student and is friendly
- As someone who is a high-achieving student and cocky
- As a mystery person
- Other answer:

Mentoring and Communication

Listening Barriers and Skills

Common Problems/Barriers in Listening

1. Viewing a topic as uninteresting.
2. Criticizing a speaker's appearance or her/his communication style (verbal cues, nonverbal cues, or both) rather than responding to her/his message.
3. Becoming "overstimulated" by something the speaker says, such that we begin thinking of our own rebuttals and fail to hear the rest of what the speaker has to say.
4. Listening only for facts.
5. Tolerating, creating, or failing to adjust to distractions.
6. Faking attention.
7. Listening only to what is easy to understand
8. Allowing emotion-laden words to interfere with listening (e.g., preferred group designations; racist, sexist, or homophobic language).
9. Permitting personal prejudice or deep-seated convictions to impair comprehension.
10. Wasting the advantages of the differential between speech rate and thought-processing speed.

Improving Listening Skills

1. Develop a desire (motivation) to listen, regardless of your level of interest in the subject matter.
2. Increase your capacity to listen.
3. Infer the speaker's intent or purpose: what is the speaker implying or suggesting about her/his goals or needs?
4. Determine *your own* purpose in every listening situation.
5. Become aware of your own biases and attitudes. What words or ideas or beliefs function as "shock" words to you?
6. Learn to use your "spare time" effectively and productively as you listen.
7. Analyze your listening habits (both productive and unproductive).
8. Be mentally and physically prepared to listen.
9. Delay judgments; hear the speaker out before you make judgments.
10. Listen not only for facts, but for main ideas, principles, concepts, and patterns.

Self-Inventory of Listening Habits

The purpose of this inventory is to help you gain a better understanding of your listening habits. When you have completed it, you should be able to describe your listening habits, and you should have established a priority of listening habits to improve. This is, of course, a subjective inventory and not an objective test.

Directions: Read this list, and place a check in front of each habit that you now have, even if you use that habit only a third to a half of the time. Then, re-read the habits you have checked, and place **two checks** in front of those habits that you think you perform almost all of the time that you spend listening, perhaps 75-100% of your listening time.

1. I prepare myself for listening by focusing my thoughts on the speaker and the expected topic and committing my time and energy to listen.
2. I ask questions about what I have just heard before letting the speaker know what I heard and understood.
3. I follow the speaker by reviewing what he or she has said, concentrating on what the speaker is saying and anticipating what he or she is going to say.
4. I analyze what I am hearing and try to interpret it to get the real meaning before I let the speaker know what I heard and understood.
5. I look at the speaker's face, eyes, body posture, and movement, and I listen to his/her other vocal cues.
6. I think about other topics and concerns while listening.
7. I listen for what is *not* being said, as well as for what is being said.
8. I fake attention to the speaker, especially if I'm busy or if I think I know what the speaker is going to say.
9. I show in a physical way that I am listening, and I try to help set the speaker at ease.
10. I listen largely for the facts and details, more than I listen for ideas and reasons.
11. I am aware of my own facial, body, and vocal cues that I am using while listening.
12. I evaluate and judge the wisdom or accuracy of what I have heard before checking out my interpretation with the speaker.
13. I avoid sympathizing with the speaker and making comments like, "I know just what you mean — the same thing has happened to me," and then telling my story before letting the speaker know what I heard and understood.

14. I find myself assuming that I know what the speaker is going to say before he or she has finished speaking.
15. I accept the emotional sentiment of the speaker.
16. I think up arguments to refute the speaker so that I can answer as soon as he or she finishes.
17. I use “echo” or “mirror” responses to feedback to the speaker specific words and phrases the speaker has used that I need clarified.
18. I am uncomfortable with and usually reject emotional sentiments of the speaker.
19. I paraphrase or summarize what I have heard before giving my point of view.
20. I am easily distracted by noise or by the speaker’s manner of delivery.

Place an X in the blank by each number you have double-checked.

- | | |
|--------|--------|
| 2____ | 1____ |
| 4____ | 3____ |
| 6____ | 5____ |
| 8____ | 7____ |
| 10____ | 9____ |
| 12____ | 11____ |
| 14____ | 13____ |
| 16____ | 15____ |
| 18____ | 17____ |
| 20____ | 19____ |

Now you have an inventory of your *effective listening habits* (all of the *odd-numbered* habits that you checked), your *ineffective listening habits* (all of the *even-numbered* habits that you checked), your *most effective listening habits* (all of the *odd-numbered* habits that you *checked twice*), and your *most ineffective listening habits* (all of the *even-numbered* habits that you *checked twice*).

What Is EOP, and Who Are EOP Students?

By Glenn Omatsu

At CSUN, EOP (Educational Opportunity Program) serves as the conscience of the university and the center for innovation and creativity. EOP has served these two important roles for four decades.

EOP serves as the conscience of CSUN by reminding administrators and faculty – sometimes gently and other times loudly – of their fundamental responsibilities to serve the needs of low-income students, to carry out the university’s mission of advancing diversity and educational equity, and to defend the right of all people in California to a college education.

EOP serves as the center for innovation at CSUN by pioneering initiatives relating to admissions, instruction and pedagogy, student services, community outreach, community service, and other aspects of university life. Today, many initiatives launched by EOP have become standard practices at CSUN. These include student advising, mentoring and tutorial projects, transitional programs to help freshmen succeed in college, pedagogical innovations to improve learning outcomes, and retention strategies to increase student persistence rates for graduation.

For the past decade, EOP is best known for its innovative approaches in working with “special-admit” freshmen through its Bridge Transitional Programs.

“Special-admit” freshmen are a subset of EOP students who were admitted to CSUN by EOP based on their high motivation and capacity to deal with life obstacles despite having low grades and test scores in high school. To help these students succeed at CSUN, EOP during the past decade reorganized its Bridge Transitional Programs to emphasize long-term learning communities and linked and integrated curricula – all built on the foundation of mentoring.

Today, growing numbers of officials in the CSU system are recognizing CSUN EOP as one of the system’s foremost models of a “learning-centered” program. EOP has gained this recognition due to its innovative approach that integrally links together its admission process, its student services, and its classroom academics to promote success for its students.

Officially, here is how EOP defines itself on its CSUN website: “EOP designs, administers, and supports programs that deliver access and retention services to CSUN students. Established in the Fall of 1968 by a legislative mandate, EOP focuses on highly motivated low-income, first-generation college students, a population that not only reflects the diversity of CSUN's feeder communities, but also the diversity of the university itself. Currently the total undergraduate enrollment of EOP students is approximately 2650 students (8% of university population).”

At CSUN in the late 1960s, student activists and community supporters embedded mentoring into the founding mission of EOP. Mentoring permeated all aspects of EOP’s work with students. For example, EOP founders connected the admission of low-income students from historically disadvantaged communities to retention services to enable them to succeed. Moreover, for EOP founders, mentoring did not refer to traditional one-to-one matching programs with designated “mentoring times.” Instead, mentoring was infused into all interactions of staff and peer mentors working with students. These EOP mentors worked together as a community and in the process created a distinct EOP culture of mentoring on this campus. Today, the core principles of the CSUN Faculty Mentor Program – “mentoring on the run,” building a “community of mentors,” and promoting a “culture of mentoring” on our campus – are drawn from the founding mission of EOP and its cornerstone of mentoring.

Who, then, are today’s EOP students? Officially, CSUN administrators define them as low-income students who are the first in their families to attend college. In contrast, EOP leaders define their students as much, much more. First, EOP students are high potential students. They are students who have been admitted into EOP through its holistic and deliberative admissions process involving several steps, including group and individual interviews. Second, EOP students who participate in the Bridge Transitional Programs for freshmen are students who embrace RRAM: the values of Respect, Responsibility, (positive) Attitude and Maturity. Third, EOP students, as a result of working with mentors, want to give back to EOP and the home communities that nurtured them.

Overall EOP is a vital part of our university. All students, all faculty, and all staff at CSUN benefit from the existence of EOP. And all people in California benefit from the accomplishments of EOP students.

The Primal Teen: What the New Discoveries About the Teenage Brain Tell Us About Our Kids

Underneath that baseball cap, there's a brain that's still under construction

By Michael Valpy

Saturday, May 10, 2003 - *The Globe & Mail*, Toronto, Canada

Denise arrived home from work to find three letters waiting for her. One said her teenage son had made his school's honour roll, a second said he had been selected to play in an outstanding youth orchestra and the third said he was suspended from school for cutting history class to hang out downtown.

The mother of twin teenage boys was appalled by her sons' tantrums, stomping of feet, slamming of doors, name-calling and fighting. The parents of a 15-year-old were horrified to discover their daughter was sneaking out of the house at midnight to see a 24-year-old man she had just met.

These stories come from a fascinating new book by *New York Times* medical science and health editor Barbara Strauch, titled *The Primal Teen: What the New Discoveries About the Teenage Brain Tell Us About Our Kids*. Ms. Strauch brings a good-news message, so to speak, to parents of teenagers: You aren't imagining things -- your sons and daughters really do have wonky brains and can be periodically, briefly insane.

Recent research in [Canada](#) and the United States is revealing that previous notions of the adolescent brain as a finished piece of work are wrong, and that the shibboleth of attributing teenagers' aberrant and flaky behaviour to hormones is, at the very least, an incomplete explanation. In fact, the adolescent brain goes through a biological remodelling as critical to human development as that which takes place during the first two years of life -- a discovery with profound implications for educators, behavioural scientists, pediatric health professionals and, with luck, bewildered and desperate parents.

Virtually every particle of the teenage brain is under reconstruction: Nodes, lobes, neurons, synapses, the long strings of axons that are the pathways for electrical signals speeding (or, in the case of teenagers, jolting and backfiring) from one part of the brain to another and the itchy-bitsy dendrites that carry chemical messages between neurons. Nature should post "Sorry for the inconvenience" signs on their foreheads.

What the body is doing is rebuilding teenagers' brains so they can be adults. The process makes life trying for adolescents and everyone around them, tossing teens into a cauldron of cognitive mayhem, stormy moods, grunts, bizarre reasoning and the inability to conceive of the future beyond Friday night.

The brain weight of a six-year-old is 95 per cent the weight of an adult's, which is what has led neural scientists in the past to assume the teenage brain was a done deal. But six years ago, child psychiatrist and neuroscientist Jay Giedd of the U.S. National Institutes of Health was looking at

the results of teenage brain scans he had had analyzed by the [Montreal](#) Neurological Institute when he suddenly realized the brains he was studying were undergoing major changes.

The grey matter, their outer layer, was thickening -- going through a period of overproduction of cells, or what neuroscientists aptly describe as "exuberance" -- and then dramatically thinning down, "a level of change that was supposed to be largely over by kindergarten," Ms. Strauch writes.

Dr. Giedd told her, "Basically I thought I was wrong. I thought the numbers were off. "There was so little information out there, and what was there said that this overproduction was over long before teen years. I just kept looking at the data. Then after about six months of looking at more brain scans, I thought, 'Hey, this is for real.' "

Since then, research into the teenage brain has become as exuberant as the object being studied. Every cell and dendrite is being peered at -- from Dr. Giedd's continuing research and the work of Tomaz Paus at the Montreal Neurological Institute, who is examining adolescent neural connections between the brain's important speech areas, to the studies of neuroscientists like University of [Chicago](#)'s Peter Huttenlocher, who's counting teenage synapses.

Teenagers, it is now known, experience short-circuits in the neural wiring to their memory function and have difficulty understanding facial expressions, instructions and jokes (forget about using irony; it's not that many don't get it, they can't get it). One of the reasons for the impaired abilities is that teens use the brain's primal, emotional fight-or-flight centre rather than the brain's rational centre to decode signals from the social world around them, with frequent and fractious misinterpretations. To illustrate, Ms. Strauch describes what happened to teenagers who underwent brain scans while being shown the face of a man in fear.

The part of their brains that lit up the brightest as their minds worked to make sense of the image was not the prefrontal cortex, the centre of rational judgment used by the adult brain to sort out complex nuances of emotions. It was the amygdala, an almond-shaped knot in the middle of the brain that is one of the key areas for instinctual reactions such as fight or flight, anger or "I hate you, Mom."

Research also suggests that the connections between the left and right side of teenagers' brains are incomplete, affecting their abilities to link speech and written language to thought. Synaptic gaps in the brain development of younger teens can render them largely incapable of abstract thinking, and put algebraic equations, puns and the normal, inherent contradictions in life beyond most of their grasps.

Brain chemistry accounts for their preference for staying up late and sleeping late -- useful information for work-whacked parents desperate to get to bed while their teenage offspring are prowling bright-eyed around the house. Sleep researcher Mary Carskadon at Rhode Island's Brown University has discovered that melatonin, the natural hormone that regulates sleep (in this case the explanation *is* hormones), doesn't begin flowing into teenage brains until about 10:30 p.m., after most of their parents' brains have decided to call it a day. Add to this the fact teenagers need about 10 hours' sleep, two hours longer than adults, and you realize they are likely to be in perpetual sleep deficit. Why the late-flowing melatonin? Researchers aren't sure,

but they've hypothesized that it has to do with some primal survival mechanism.

Most significant of all, teens' prefrontal cortex -- the brain's executive decision-making function, its CEO, its policeman, its planner, strategizer and centre of judgment -- doesn't work properly (which is why the amygdala is employed to decode the social world, sort of a temporary detour while the main highway is being repaired). The prefrontal cortex is still a work in progress during the time that teenagers need it most, when they begin dewy-eyed forays of exploration into the world on their own. Indeed, the frontal lobes, with their software of reason, risk assessment and impulse control, are pretty much the last region of the brain to reach full development, not until their owners are past 20.

All of which means your teenaged children may be taller than you, have deeper voices (something fathers tend to find difficult) and at times may even sound more reasonable -- as any parent knows who suddenly realizes her son or daughter is persuading her to accept some totally goofy idea -- but much of the time their pilots are missing from the flight deck. Their adult physical appearance is a Potemkin Village sham. Everything inside their skulls is a muddle, as chaotically disorganized as their bedrooms, backpacks and school lockers. Moreover, the research reveals that while the adolescent brain is growing in huge spurts, it's also pruning earlier growth it no longer needs, clear-cutting millions of grey-matter cells in accordance with its modus operandi of "use it or lose it."

The brain is thought to work by overproducing cells, retaining those that are put to use and eventually tossing out the rest. According to this theory (not completely accepted in the world of neuroscience), these periods of rapid, almost explosive growth -- or exuberance -- occur when the brain is being primed to acquire new skills. What this pruning or thinning means, says Dr. Miriam Kaufman, director of the adolescent medicine clinic at [Toronto's](#) Hospital for Sick Children, is that not only does the brain shape behaviour but behaviour seems to shape the brain.

In other words, for the teenager engaged in sports or music or reading, the cells and connectors necessary for those actions will flourish and become hardwired to the brain's scaffolding. And if the teenager's primary activity is playing video games or sofa-flopping, it will be the brain cells enabling those activities that survive, while others wither. "The research is reinforcing the kinds of things we've been thinking about," Dr. Kaufman says. "But until now, when you've talked to people about improving mental health [of children] there's been so much push on the first two years. Teens have been thought of as geriatric."

Ms. Strauch reports that the research has led at least one neural scientist, Deborah Yurgelun-Todd at [Boston's](#) McLean psychiatric hospital (she did the study with the face of the man in fear), to revamp her parenting techniques: "I used to ask my daughter to put a dish in the dishwasher and brush her hair and pick up her clothes, and then I'd get angry that she only did one of those things. Now I don't expect her to hold so much information in her head. She does one thing, and I expect that now."

Interestingly, many educators have intuitively understood that changes were taking place inside teenage brains, but until now have lacked the substantiating evidence. In the 1980s, when Anne Kerr was a classroom geography teacher, she would take her Grade 9 students on a walking tour of the school's neighbourhood and then ask them to draw a bird's-eye map of it. "One-third of the

class could do it," she said. "The majority couldn't. They could draw houses on the street, but not a bird's-eye view." The expectation at that time, she said, was that all Grade 12 students could discuss theoretical philosophy and do complex algebraic equations. "But in fact only 20 per cent of 18-year-olds could go from concrete to formal [theoretical abstract] learning. This was astounding to me as a classroom teacher. That's what's so exciting about this research."

Ms. Kerr, now principal of Ursula Franklin Academy, a Toronto public high school, found herself with so many questions she couldn't answer about the workings of the adolescent brain that she took a sabbatical in 1992 to study what was then known about it. "I learned so much. It's enabled me to do so much more -- and we still don't know enough about the brain. There's still a tremendous amount of room for research." What Ms. Kerr and her staff try to work with as a teaching methodology is what she calls the zone of proximal development -- figuring out what stage of development a student's brain has reached and tailoring teaching to fit that stage. Needless to say, it is an approach that doesn't fit comfortably with rigidly standardized curricula and grading. "How do you go from concrete to formal learning? There's no straight line," she says. "The brain develops in spurts and plateaus. The spurts require stimulation. The plateaus are a period of consolidation." Ms. Kerr learned to say this to students: "Your head is a jungle, and there's a road crew in there that's working, and we've got to stimulate you to keep that road crew working. You need someone like me to meet you where you're at."

Dr. Kaufman of Toronto's Hospital for Sick Children says one of the strongest messages that comes out of the new knowledge about the brain's pruning process is that schools and parents should be pushing music, language and sports skills at teenagers to ensure their brains don't toss out the cells needed for those activities. "We're talking about cycles [in the brain's growth]," she says. "If you're not reading, if you're not learning another language . . . this is going to influence changes in the brain."

Is there a list of do's and don't's for parents?

Certainly yelling at them doesn't help. "Abstract thinking comes and goes with stress," Dr. Kaufman says. "We have to be making sure that all our interactions with teenagers are developmentally appropriate." She refers to parenting guru Barbara Coloroso's model: Set limits and be respectful.

Columbia University child psychiatrist Peter Jensen, the father of five teenagers, says he has learned to replace the parenting jackhammer with subtle nudges and hints at possible outcomes of risky behaviour and then leave his offspring alone to test-drive their newly connecting prefrontal cortexes. "When my oldest child was a teenager, I was always trying to be in control, always trying to be her forebrain. I am trying to raise the fifth one differently -- giving structure, but also giving more choices to her own forebrain, choices she can make herself."

The experts say: Expose them to as many experiences as you can. Those experiences shape the brain. The experts say: When your teenagers grunt and yell at you, remember that you grunted and yelled at your parents. The experts say: Let your teenagers know their brains are works in progress.

Barbara Strauch says: Let them sleep in.

Students Offer Prescriptions for Teachers

In a new book, teens describe the delicate balance they want from their instructors.

By Duke Helfand, Los Angeles Times Staff Writer
January 8, 2003

Fixing the nation's urban high schools has become a near-obsession among educators in recent years. Create smaller campuses, many say. Build more charter schools, others urge. Don't let students graduate until they pass a test. Amid all the feverish reform talk, however, the adults might want to listen to what the kids have to say about their teachers. That philosophy is behind an unusual national effort to tap the opinions of American high school students.

"Part of a teacher's job is giving teenagers the practice at ... independence," says Mahogany Spears, 17, of San Francisco. And that means giving students the ability to "try things out for themselves." Vance Rawles, 19, of New York agrees, to a point. "I hate to admit it, but respect and authority are part of the job," he says. "Kids expect adults to give us directions and boundaries, but it's a balance."

And 17-year-old Tiffany Metts of Providence, R.I., says teachers should maintain their distance. "If you are too friendly with the students, when things get out of control and you try to get authoritative, they're like, 'Yeah, whatever,' and don't pay any attention," she says.

The three are speaking to the age-old tension experienced by anyone dealing with teenagers: give them freedom, give them guidance -- sometimes at the same moment.

Such comments fill the pages of "Fires in the Bathroom," a soon-to-be-published book in which 40 high school students from across the country offer advice for the adults who oversee their education. In the book, produced by the Providence-based nonprofit education group What Kids Can Do, students get a rare opportunity to voice their opinions about what works and what doesn't in the classroom. More than anything else, these young people -- from San Francisco, Oakland, New York and Providence -- want teachers who care about them and respect them. They want teachers who can strike the delicate, if difficult, balance between authority and flexibility.

As the book emphasizes, teenagers crave relationships that make learning possible. "What we're hearing from students is that they want partnerships," said Kathleen Cushman, a veteran education journalist who wrote the book along with the 40 students, whom she interviewed at length last spring. "Everyone knows that teenagers can be hard to communicate with," Cushman added in an interview last week. But "people who think of teaching as simply the delivery of information are missing the point."

The book, to be published in April by the New Press (New York) arrives at a time when government and philanthropies are investing tens of millions of dollars to transform oversized American high schools -- some with 5,000 students or more -- into smaller learning communities where students can get more attention and develop closer ties to teachers and campus life.

Among the most prominent of these efforts is a \$350-million project by the Bill & Melinda Gates Foundation. The group is donating money to organizations that will create or redesign 570 small high schools around the country that will each enroll no more than 600 students.

Although those efforts are important, they still pay little attention to what's on young people's minds, the book's authors say. "You can restructure schools until the cows come home, but you need to get these relationships right from the start," Barbara Cervone, an education reformer who co-founded What Kids Can Do two years ago, said in an interview. "Certainly smaller classrooms and smaller schools create some of the basic elements for more positive relationships between students and teachers. But that alone isn't sufficient."

The book's title, "Fires in the Bathroom," speaks to the breakdown in order that afflicts some classrooms. As 17-year-old Lauraliz Rivera of New York says in a chapter titled, "When Things Go Wrong," her class gave trouble to her first-year teacher for the whole first semester. "But then, by second semester, we let up on him, because we saw he was doing things right. Another teacher, we kept going on her, because she was still scared." Students would go to the bathroom at times when they were not supposed to and then would "set fires in the bathroom, while she was trying to be so friendly."

Another student, 17-year-old Luis Martinez, felt alienated at the nearly 2,000-student Fremont High School in Oakland, where he says he got little personal attention from teachers in ninth grade. Then, in 10th grade, he moved to a new, smaller public school called Life Academy, which concentrates on science and health studies. There, he says, teachers took an immediate interest in him, even giving out their home phone numbers in case he needed to talk. "The teachers are always there for you, always helping you out," Luis said. "They are like your friends. They tell about their own life experiences. The more you know your teachers, the more they can help you."

Cushman and Cervone originally set out to produce a modest workbook for new teachers at the request of the MetLife Foundation, which supports education and health initiatives. MetLife paid for Cushman's time and travel and for small stipends for the students. The pair found students through their contacts in the four cities. As Cushman began meeting with students, she realized that the teenagers had plenty to say. And so the project evolved into a book.

To help teachers understand the job better, "Fires in the Bathroom" doles out practical advice, much of it from the students. The book, for example, suggests that teachers hand out questionnaires on the first day of school. Among the recommended questions: What do you do after school? What do you imagine yourself doing 10 years from now? What's a fair amount of homework time to expect?

Rawles, the New York student, said he welcomes letting teachers learn more about him as he figures them out, too. The best instructors, he said, have a form of telepathy about teenagers' shifting moods. "They are perceptive. They look behind your activities. They are inquisitive," he said. "The closest thing you'll get to reading a person's mind is being empathic."

Minority Kids Spend Most of Their Waking Hours Plugged In

By Mary Brophy Marcus, USA TODAY
June 6, 2011

Minority children spend an average of 13 hours a day using mobile devices, computers, TVs and other media — about 4½ hours more than white kids, says a report out today. The findings, from Northwestern University, are being presented to childhood and telecommunications experts in Washington, D.C.

The results are from an analysis of two Kaiser Family Foundation surveys that tracked media use by kids 6 to 18. Researchers analyzed that data to find out how black, Hispanic, Asian American and white youth use media for homework and for fun, and how long they're plugged in on any given day.

Among 8- to 18-year-olds, Asian Americans logged the most media use (13 hours, 13 minutes a day), followed by Hispanics (13 hours), blacks (12 hours, 59 minutes), and whites (8 hours, 36 minutes.)

Researchers didn't say why, but some experts have theories. "Children may turn to media if they feel their neighborhoods lack safe places to play or if their parents have especially demanding jobs that prevent engagement," says Frederick Zimmerman, chair of the department of Health Services at UCLA School of Public Health.

"It's clear that, overall, American youth spend an enormous amount of time with media, but minorities spend most of their waking hours with media," says study director Ellen Wartella, head of the Center on Media and Human Development in the School of Communication at Northwestern.

The report shows that compared with white children, minority youth:

- Watch TV and videos one to two hours more a day;
- Listen to music about an hour more a day;
- Use computers about 1½ hours more a day;
- Play video games 30 to 40 minutes longer a day.

Black (84%) and Hispanic kids (77%) also are more likely to have TVs in their bedrooms and to eat meals in front of the TV.

"Everyone is using too much media across the board. There are only so many hours in the day. They're going to miss out on a lot of important things, especially face-to-face contact," says Eleanor Mackey, a clinical psychologist with Children's National Medical Center in Washington, D.C. She says kids need more family time, and the fact that so many are eating dinner with the TV on is "alarming."

"Protect family meal times. We know this to be very important for a child's development," Mackey says.

There shouldn't be a rush to blame or exonerate parents, but rather an effort to try to understand the factors that drive such high levels of use, Zimmerman says.

Growing obesity rates among children, especially minority youth, may also correlate to the high screen time, says Michael Rich, professor of pediatrics at Harvard Medical School, and director of the Center on Media and Child Health at Children's Hospital Boston. He says more research is needed to clarify that relationship, however. Rich, who blogs online at Askthemediatrician.org, says he is also concerned about the content of media being viewed, and that children are losing valuable sleep hours to electronics, which can affect school performance and behavior.

The research also indicated that among all groups, computer playtime far outweighs computer use for homework in the 8- to 18-year-old age range; only about 16 to 20 minutes a day can be chalked up to school-focused activities, the study shows.

In addition, depending on the primary medium involved, as many as 47% of 8- to 18-year-olds in all groups say that "most of the time" they multi-task with another type of media.

"These findings should be a clarion call to minority communities to protect their children's future health and well-being by insisting on a right to more media-free time," Zimmerman says.

Mentoring as the “Giving and Receiving” of Wisdom

Mentoring is defined as a reciprocal relationship — or, in the words of Chungliang Al Huang and Jerry Lynch, mentoring is the “giving and receiving of wisdom.” Oftentimes, mentors can quickly list all they give to those they mentor, but they have more difficulty listing all they receive. Mentors who see mentoring as mainly giving are on the road to “burn out.”

List at least five things you recently have given to freshmen that you will mentor. Was it easy or hard to create this list?

List at least **seven** things you have received from freshmen that you will mentor. Was it easy or hard to create this list?

Note: If it is easier for you to identify what you are giving than what you will be receiving, take the time to reflect on the “gifts” you are receiving each day by mentoring freshmen to avoid “mentor burn-out.”

Avoiding Mentor Burn-out

Appreciating Your Web of Mentoring Relationships

In western societies, mentoring is stereotyped as a one-to-one relationship involving one mentor interacting with a single mentee. In reality, all mentoring occurs in a web of relationships. This web provides both a network of support and a network of resources. Becoming more conscious of your web of mentoring relationships is one way to counteract “mentor burn-out,” especially when confronted with a particularly difficult problem. In your work as a peer mentor, what is your “web of mentoring relationships”? How can this web help you when you are faced with a particularly challenging situation?

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

Early Warning Signs for Fall Semester: Watch Out If You Hear EOP Bridge Students Say . . .

“My family’s problems (my personal problems) are my own business and no one else’s business. Others don’t have to know about my business.”

“The reason I don’t talk to the EOP mentors any more (in Fall Semester) is because they have all changed from the way they were in the summer. Everyone is now different, except for me.”

“I told Shiva on the last day of Bridge: ‘Shiva, you don’t have to worry about me in Fall Semester. I’ve really become a new person, and I won’t ever go back to the way I once was.’”

“I don’t need the EOP community. I have my own community with my friends from high school (my new friends in the dorm, my family, etc.).”

“The reason I’m failing one class is because the teacher is bad.”

“I’ve already transitioned into a college student and practice the Bridge values really well. I don’t need to make any more changes.”

“While it’s good for other Bridge students to learn from the past mistakes of experienced students such as mentors, I can’t learn that way. I learn best from my own mistakes, even if it means learning the hard way.”

“My parents are so proud of the changes I’ve made this summer that they removed my curfew (bought me a car, gave me money, etc.). I told them that I’ll never go back to the way I was before.”

“Shiva and EOP mentors have no right to tell me to break up my boyfriend (or girlfriend). Shiva has no right to tell me who I should hang around.”

“For college students, attendance is overrated. I have a friend who got an A in a class, even though he never went to class but did well on the final.”

Spoken during the fifth week of Fall Semester: “I can’t afford to buy the textbook for the class.”

“I don’t need to go to math tutoring because I get help from my girlfriend (sibling, mother, etc.).”

“I’m a really good student, and I don’t need to be around the kids in this program. I can make it better through college by myself.”

“Why the shit did Sean call me in for a meeting? I don’t have a fuckin’ attitude!”

“People have always told me I’ve very mature for my age. I’ve never had a problem of being immature.”

“Lavelle can never understand my problems at home because unlike him I come from the hood.”

“I’ve always been a respectful person. As long as others respect me, I’ll respect them. But if you don’t respect me, then watch out! I’ll really fuck you up!”

“I don’t have time to go to EOP Central (math tutoring, writing labs, my classes, etc.).”

Investigating a “Culture of Mentoring” on Campus

Visit and quickly observe about three to five offices on your campus to identify both positive and negative examples of a “culture of mentoring.” Find at least one example of an office with a positive “culture of mentoring” for students and only one example of a negative “culture of mentoring.” If you cannot find any positive examples, identify offices that have “mixed” cultures with both positive and negative elements.

Campus offices with a positive “culture of mentoring” have the following characteristics:

- Students hang out in these offices regularly and visit them frequently, even when they don’t need to go there for official business.
- Staff in the office don’t have the mainstream mentoring mindset that believes mentoring of students only occurs formally through one-on-one meetings and designated “mentoring times”; instead, staff have mastered the alternative mindset that mentoring occurs in every interaction with students, no matter how brief.
- Everyone in the offices emphasizes “human interactions” in their encounters with students.
- Staff — especially student assistants — answer the phone with a smile.
- If the office has a reception area for student visitors, the space doesn’t look like a dentist’s waiting room or the DMV waiting area.
- Even though everyone in the office is busy, all staff are still able to answer students’ questions — with a smile.
- There is remarkable consistency in behaviors and attitudes between the highest-ranking person in the office (boss, manager, director, etc.) and the lowest-ranking person (e.g., student assistant).
- Staff interact with each other as a “community of mentors” — they help each other, nurture each other, and provide support without having to be told to do so.
- Visitors often hear warm laughter in the office.
- Staff working in this office — especially student assistants — seem to like working there.
- Based on your brief observations, if you were to ask a student visitor to describe the “culture of mentoring” in this office with three adjectives, what three adjectives would they say?

Mentoring Tips: First Interactions

- Learn the names of all students you will be helping as quickly as possible. In our workshop, we will go over strategies for doing this, but in the meantime try to learn as many names as possible.
- Try to identify “early warning signs” that will help you identify students that could fail or do poorly. At our workshop, we can discuss some “early warning signs,” but try to identify at least five “early warning signs.”
- Think about small ways that you can help students with time management.
- Think about small ways that you can “mentor on the run” with all students. Especially use the time right before formal meetings and activities with your students as mentoring times to get to know quiet students.
- To help students, think about ways you can use the support and resources of your network across campus.
- Think about ways that you can use the help of your “community of mentors” – i.e., the peer mentors whom you work with.

Discussion: Are You Using All Your Strength as a Freshman?

Some freshmen are having problems in Fall Semester because they are not using all of their strength to do well in their first year of college. Students need to learn how to use both their “inner strength” and their “outer strength.”

Using All Your Strength

A young boy was walking with his father along a country road. When they came across a very large tree branch, the boy asked, "Do you think I could move that?"

His father answered, "If you use all your strength, I'm sure you can."

The boy tried mightily to lift, pull, and push the branch, but he couldn't budge it.

Discouraged, he said, "Dad, you were wrong. I can't do it." His dad said, "Try again."

This time, as the boy struggled with the task, his father joined him. Together they pushed the branch aside.

"Son," the father said, "the first time you didn't use all your strength. You didn't ask me to help."

This is an important lesson. There are many things we can't do alone, but that doesn't mean we can't get them done. We're all surrounded by resources that can be mobilized to help us achieve our goals including family, friends, and faith.

Sometimes we fail to ask for help because of pride or stubbornness. Sometimes we think it's a sign of weakness to admit we need a hand. And sometimes we don't even think about asking for help. Whatever the reason, it's a waste.

It's important that we learn to use all our strength. This includes inner resources such as discipline, courage, and even love. It also includes outer resources. Just as we should be willing to help others, we should be willing to ask the help of others. It's one of the great things about being human.

Michael Josephson from "Character Counts"

Name _____

Mentoring Survey for Peer Mentors

According to one longtime CSUN administrator, the single most important factor for students' academic success on this campus is their capacity to find mentors.

- I agree with this statement.
- I don't agree with this statement.
- I don't know.
- I don't understand what this administrator means.

In your first year of college, did you want to find mentors on this campus?

- Yes
- No
- I don't remember

Check the statement that best described you at this time.

- As a new college student, it was important for me to do everything by myself.
- As a new college student, I wanted to learn how to use the help of others.
- As a new college student, I wanted to learn how to do things by myself while also using the help of others.

How could mentors have helped you in your first year of college (check all answers that apply)?

- Meet with me and both listen and talk to me.
- Meet with me and do all the talking.
- Give me suggestions about campus resources.
- Provide guidance to me about dealing with personal and family problems.
- Help me understand academic expectations in college.
- Give me advice about how to work with mentors on campus.
- Other: _____
- I was not interested in having mentors help me.

What are the three most important qualities defining a good mentor for freshmen?

- | | | |
|---|--|--------------------------------------|
| <input type="checkbox"/> Academic expertise | <input type="checkbox"/> Good listener | <input type="checkbox"/> Resourceful |
| <input type="checkbox"/> Kind | <input type="checkbox"/> Approachable | <input type="checkbox"/> Friendly |
| <input type="checkbox"/> Experienced | <input type="checkbox"/> Strict | <input type="checkbox"/> Caring |
| <input type="checkbox"/> Energetic | <input type="checkbox"/> Patient | <input type="checkbox"/> Challenging |
| <input type="checkbox"/> Others: _____ | | |

For a freshman, which of the following people make the best mentors?

- | | |
|--|--|
| <input type="checkbox"/> Professors | <input type="checkbox"/> Advisors and other CSUN staff |
| <input type="checkbox"/> More experienced college students | <input type="checkbox"/> Parents |
| <input type="checkbox"/> Other family members | <input type="checkbox"/> Friends from high school |

Name _____

Mentoring Survey for College Students

According to one longtime CSUN administrator, the single most important factor for students' academic success on this campus is their capacity to find mentors.

- I agree with this statement.
- I don't agree with this statement.
- I don't know.
- I don't understand what this administrator means.

In your first year of college, do you want to find mentors on this campus?

- Yes
- No
- I don't know

Check the statement that best describes you at this time.

- As a relatively new college student, it's important for me to do everything by myself.
- As a relatively new college student, I want to learn how to use the help of others.
- As a relatively new college student, I want to learn how to do things by myself while also using the help of others.

How would you want mentors to help you in your first year of college (check all answers that apply)?

- Meet with me and both listen and talk to me.
- Meet with me and do all the talking.
- Give me suggestions about campus resources.
- Provide guidance to me about dealing with personal and family problems.
- Help me understand academic expectations in college.
- Give me advice about how to work with mentors on campus.
- Other: _____
- I am not interested in having mentors help me.

What are the three most important qualities defining a good mentor for college students?

- | | | |
|---|--|--------------------------------------|
| <input type="checkbox"/> Academic expertise | <input type="checkbox"/> Good listener | <input type="checkbox"/> Resourceful |
| <input type="checkbox"/> Kind | <input type="checkbox"/> Approachable | <input type="checkbox"/> Friendly |
| <input type="checkbox"/> Experienced | <input type="checkbox"/> Strict | <input type="checkbox"/> Caring |
| <input type="checkbox"/> Energetic | <input type="checkbox"/> Patient | <input type="checkbox"/> Challenging |
| <input type="checkbox"/> Others: _____ | | |

For a college student, which of the following people make the best mentors?

- | | |
|--|--|
| <input type="checkbox"/> Professors | <input type="checkbox"/> Advisors and other CSUN staff |
| <input type="checkbox"/> More experienced college students | <input type="checkbox"/> Parents |
| <input type="checkbox"/> Other family members | <input type="checkbox"/> Friends from high school |

The peer mentor and professor who gave you this survey also filled it out. Are you interested in how they answered each of these questions?

- Yes, I am interested
- No, I am not interested

Talking with Professors:

Some Suggestions for EOP Freshmen

During this semester, how many times have you done the following things in your classes?

Asked questions to professors: ___ times

Participated in class discussions: ___ times

Talked to professors before or after class: ___ times

During this semester, how many times have you visited your professors during office hours?

___ Never

___ Once

___ Two or three times

___ More than four times

What are the main reasons that freshmen do not visit their professors during office hours?

___ They don't know what to say or do

___ They are afraid

___ They are too busy to go

___ They are doing well in class and don't need to talk to their professors

___ Other: _____

Why is it important for EOP freshmen to learn how to talk with their professors and visit them during office hours? Write down at least three important things.

From discussing this question with fellow EOP freshmen, write down three more important things that you heard.

Write down two examples of "lower-level questions" that you can ask in your classes. (See below for examples)

Write down two examples of "higher-level questions" that you can ask in your classes. (See below for examples)

A Guide to Asking Good Questions

Lower-level Questions

Knowledge – identification and recall of information

- Who, what, when, where how _____?
- Describe _____

Comprehension – organization and selection of facts and ideas

- Retell _____ in your own words.
- What is the main idea of _____.

Higher-level Questions

Application – use of facts, rules, principles

- How is _____ an example of _____?
- How is _____ related to _____?
- Why is _____ significant?

Analysis – separation of a whole into component parts

- What are the parts or features of _____?
- Classify _____ according to _____.
- Outline/diagram _____.
- How does _____ compare/contrast with _____?
- What evidence can you list for _____?

Synthesis – combination of ideas to form a new whole

- What would you predict/infer from _____?
- What ideas can you add to _____?
- How would you create/design a new _____?
- What might happen if you combined _____ with _____?
- What solutions would you suggest for _____?

Evaluation – development of opinions, judgments, or decisions

- Do you agree _____?
- What do you think about _____?
- What is the most important _____?
- Prioritize _____.
- How would you decide about _____?
- What criteria would you use to assess _____?

What Is the Difference Between a “C Student” and an “A Student”?

Most EOP freshmen associate getting A’s in classes with the following things:

- Reading all assigned materials
- Underlining and highlighting important materials in readings and taking notes
- Starting on assignments early and not finishing them at the last minute
- Taking careful notes from professors’ lectures and reviewing the notes
- Knowing how to study for tests
- For essay assignments and research papers, starting early enough to write several drafts
- Studying at least three hours for each hour spent in a class
- Always being well-prepared in classes by having the required books and other materials
- Having some fun in college, but not to the neglect of studying

Most EOP freshmen associate getting C’s in classes with the following things:

- Doing just enough work to get by
- Doing some assigned readings but not all
- Starting on assignments late and sometimes not completely finishing them
- Not always paying attention in class
- Doing some studying for tests
- For essay assignments and research papers, turning in first drafts as final papers
- Not always having all the required books and other materials for classes
- Doing some studying but making sure that studying doesn’t interfere with having fun

In reality, EOP freshmen who follow the above guidelines for getting C’s in their classes will end up failing most of their classes.

In reality, experienced EOP students know that the difference between getting A’s and getting C’s in classes also depends on learning how to “study smart.” To learn how to “study smart,” turn this paper over.

Learn How to “Study Smart” to Get A’s Rather Than C’s

Here are some things that experienced EOP students suggest:

- **Set Goals:** Each semester before your classes begin, set goals. What grades do you want? What do you need to do to get that grade? Remember that no experienced EOP student sets a goal of getting a C. Those who have a goal to “just get by” are freshmen who are usually gone after their first semester of college.
- **Go to All Your Classes — Don’t Miss Classes:** One experienced EOP student said: “When I was a freshmen, I used to think I didn’t need to go to all of my classes all the time. I used to take days off like I did in high school. Now that I’m a junior, I don’t ever miss any classes. Why? When I miss a class, I have really missed more than one session, and I have a lot of work to do just to catch up with everything that I missed that day. I’ve found that it’s a lot easier to go to class all the time so that I don’t have extra work to do.”
- **Spend a Lot of Time on Campus and Use All Campus Resources:** Unlike freshmen who hurry to leave campus right after classes, experienced EOP students spend as much time on campus as possible. Experienced EOP students use all resources on campus, such as EOP advising, writing labs, the library, tutorial services, career counseling, and personal counseling.
- **Learn How to Form Study Groups:** For difficult classes, experienced EOP students participate in study group with fellow students rather than trying to master hard materials by themselves.
- **Find a Mentor on Campus:** EOP Director José Luis Vargas states that the single most important factor determining whether an EOP freshmen will graduate is their ability to find a mentor on campus. Mentors can be professors, but they can also be staff members and even experienced students. Mentors are especially valuable for first-generation college students.
- **Visit Professors and Staff in Their Offices:** Experienced EOP students get to know professors and staff and visit them in their offices. Professors and staff can provide information about job opportunities and can offer advice about career development and life enrichment.

Mentoring Resources for Peer Mentors

CSUN Faculty Mentor Program website

Learn how to “mentor on the run,” how to promote a “culture of mentoring” in your classroom, and how to build a “community of mentors” in your program

www.csun.edu/eop/fmp_index.html

Promoting good classroom dynamics in a freshman classroom

www.csun.edu/eop/htdocs/bridgedemo/teachings/classdynamics.html

Power of peer mentoring

www.csun.edu/eop/htdocs/peermentoring.pdf

Student leadership development booklet

www.csun.edu/eop/htdocs/leadership_booklet.pdf

Recommended Books

John Bransford, Ann Brown, and Rodney Cocking, eds., *How People Learn* (Washington, D.C.: National Academy Press, 2000). Comprehensive summary of latest research on teaching and learning; includes numerous practical examples of good teaching practices based on brain-compatible learning.

Chungliang Al Huang and Jerry Lynch, *Mentoring: The Tao of Giving and Receiving Wisdom* (San Francisco: Harper Collins, 1995). The authors define mentoring as “giving your gift of wisdom and having it graciously appreciated and received by others who then carry the gift to all those within their sphere of influence.” To carry out mentoring, the authors contend that we need to move beyond the prevailing Western view of knowledge as only “external” and take the approach that “what we have learned is used not to impress others but rather as wisdom to help others benefit from our knowledge.”

Laurie A. Schreiner, Patrice Noel, Edward “Chip” Anderson, and Linda Cantwell, “The Impact of Faculty and Staff on High-Risk College Student Persistence,” *Journal of College Student Development* 52:3 (May-June 2011): 321-338.

http://muse.jhu.edu/journals/journal_of_college_student_development/v052/52.3.schreiner.html

Based on interviews with successful “high-risk” students and faculty and staff from different colleges, the authors identify key themes on how college personnel positively influence high rates of persistence for these students.

Barbara Strauch, *The Primal Teen: What the New Discoveries about the Teenage Brain Tell Us about Our Kids* (New York: Doubleday, 2003). Summarizes the latest research on the teenage brain and ways that parents (and educators) can use this research to more effectively understand and work with youth.

Margaret Wheatley, *Leadership and the New Science: Discovering Order in a Chaotic World* (San Francisco: Berrett-Koehler Publishers, 1999). Wheatley believes that our thinking about organizational structure and the process of change is mired in the “old science” of Newtonian physics — e.g., concepts of critical mass, entropy, equilibrium, incremental change, etc. She proposes a new paradigm for organizational thinking and change based on the “new science,” i.e., drawing from the insights of quantum physics and the study of complex systems, where “critical connections are more important than critical mass” and where dynamic disequilibrium, bifurcations in systems, and chaos are not only natural processes in organizations but opportunities for changes in human consciousness.

David Werner and Bill Bowers, *Helping Health Workers Learn: A Book of Methods, Aids and Ideas for Instructors at the Village Level* (Palo Alto: Hesperian Foundation, 2001). The authors use the framework of Paulo Freire and critical pedagogy as their approach to training health workers in the Third World, while cautioning people to adopt Freire's approach but not his dense language in their work with others. This book is filled with practical advice, stories, and instructional aids such as drawings and puppet shows to help educators (and mentors) "start at the level where people are at," to value existing knowledge in their students, and to help advance critical thinking skills.

“The fundamental task of the mentor is a liberatory task. It is not to encourage the mentor’s goals and aspirations and dreams to be reproduced in the mentees, the students, but to give rise to the possibility that the students become the owners of their own history. This is how I understand the need that teachers have to transcend their merely instructive task and to assume the ethical posture of a mentor who truly believes in the total autonomy, freedom, and development of those he or she mentors.”

Paulo Freire, Mentoring the Mentor