

ALL ABOUT

# MENTORING

A Publication of the Empire State College Mentoring Institute



EMPIRE STATE  
COLLEGE

STATE UNIVERSITY OF NEW YORK

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## From the Editors

This fall is the beginning of not just another year, but Empire State College's 25th year. What better time to reflect upon our commitment to mentoring than after a quarter century of practice, especially in the current context of fiscal (and other) "rethinking." In light of the new educational realities of the 21st century, has mentoring gone out of date? In a recent letter to the SUNY Board of Trustees by Trustee Candace de Russy, the answer seems to be yes. At least for her, student-centered education is no longer a priority. She argues that in order to meet our most important priority, academic excellence, SUNY should abandon its preoccupation with "access." Although not exactly new thinking, her position does seem to challenge an important aspect of our institution.

Our own reflections upon the current value of Empire State College's 25 years of mentoring experience have not led us to the same conclusions. One of the attributes of a student-centered college is that access and excellence do not have to be seen as mutually exclusive. Indeed, a truly individualized education promotes much greater levels of both access and excellence than are possible in an environment of mass produced studies. Of course, our experience admits to a much broader definition of excellence than de Russy probably has in mind. That's not surprising given the limited view she and others have of student learning. Of all the faculty in the four-year institutions of SUNY, we alone have had the opportunity to explore the full range of what students really can learn. We know first hand that a high grade in calculus has next to nothing to do with excellence in organizational problem solving, critical community leadership, ingenuity in management, self-discipline and dedicated study. Excellence in terms of high grades may represent no more than the highly honed skills of following instructions, meeting deadlines and producing exactly what the instructor wants to hear.

Business and community leaders know this too. For years they have said that higher education is not producing the independent, clear-thinking, adaptable individuals they need in their settings. They ask for graduates who work effectively in the real world, who know how to learn from their environments, and who are self-directed learners. A call such as de Russy's for higher admission standards and students more in tune with faculty skills and interests is certainly not responsive to their concerns. However, the kind of education that we at Empire State College deliver is. Because we mentor our students, we can make immediate use of whatever unique blend of skills they initially possess while we continually encourage them as independent learners to become even better at discovering their own resources, thinking on their own, expressing themselves clearly, experimenting with new ideas, and intertwining theory and practice. In other words, we believe that Empire State College strives to produce individuals with exactly the skills that our society values. If only the strengths of mentoring were better known, SUNY trustees would be able to move beyond tired old cliches, and our local businesses and communities would be knocking down our doors.

The University of Arizona, because of burgeoning enrollments, is building a new campus from the ground up. Instead of calling upon faculty and campus administrators to design this new facility, the provost invited a group of business and community leaders to work together to develop a broad plan for the new college that would meet the challenges of the 21st century. What this group has come up with, while probably not surprising to us, should certainly cause some serious rethinking by Trustee de Russy. Sure, the community planning group wants excellence - a college's reputation is always very important to the community (a problem of some import in our College) - but it is assumed that excellence will be the natural outcome of an innovative educational institution with carefully selected faculty. The key feature of the plan is its

student-centeredness. Absent are expensive research facilities, a major academic library, departments, and faculty-defined curricula. Course work is designed to meet student needs and interests, to be interdisciplinary, to be closely connected to the local community and culture, and to emphasize practice as strongly as it does theory. Doesn't this sound familiar?

In its review of innovative colleges, the Arizona group did not include Empire State College. While this oversight might lead us to redouble efforts to raise the College's profile, it would suggest that the ideas that form the core of our institutional being are becoming ever more broadly recognized and legitimated. We need to rethink, not our mission and goals - we've always been a little ahead of our times in that department - but the attractiveness and generalizability of our mission to the postmodern world. For too long we have thought of our college as just an option for students who don't fit within the traditional educational model. Well, that model is clearly not working very well for most people (if ever it did), and the real truth is that our college is what higher education should become for everyone.

So, as we celebrate our 25th year, let us also consider the possibilities of our mentoring model for all students. Let us explore ideas about what it would take to help younger students acquire the skills of being mentored and of being independent learners. Let us think about how we might convince the academic world that accessible, adaptable, appropriate, and yes, excellent education is not exclusively dependent upon big campuses, fancy equipment, research, and high-powered technology. Let us believe and then advocate wherever we can that the most important ingredient in any educational system is the student. Let us recognize again the wonderful virtues of a mentored education in today's world and work toward increasing its availability even more so in tomorrow's.

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## **Teaching and Learning via Videoconference: The Benefits of Cooperative Learning** **Betty Hurley Lawrence, Collegewide Programs**

Reprinted from  
*Proceedings of the CIT95 Conference, June, 1995*

**ABSTRACT:** For the past two years, the Center for Distance Learning of SUNY Empire State College has been offering courses to NYNEX employees using the company's videoconferencing equipment. Students were located at four sites and two-hour seminars were held every other week throughout the term. This paper discusses my incorporating problem-based learning and cooperative learning into the teaching of two classes for the Center for Distance Learning using this equipment: Business Mathematics and Introduction to Issues in Telecommunications. Students at each site were placed in teams of four and these groups engaged in cooperative learning activities at their sites in addition to participating over the network. Benefits of this approach have included: more variety of participation; increased insight in contributions made over the network because of time given to articulating ideas less formally at each site; and an atmosphere of sharing and teamwork.

"Teaching and Learning via Videoconference: The Benefits of Cooperative Learning Technology" is gradually changing our definition of classroom. The image of a room with four walls, chairs and desks lined in rows and a blackboard no longer fits an increasing number of "classrooms". The blackboard may be a "smart board"; the teacher (and at least some of the students) may be seen only through a one-dimensional monitor; students may be working in teams at computers or with calculators. Through a network, they may be communicating with other learners around the world.

One emerging version of the classroom has been brought about by what has been given the term videoconferencing. Through videoconferencing, a minimum of two locations are provided both audio and visual contact with each other. In the typical setup, each location has at least one camera, microphones and two monitors. Participants at either end are able to see each other (as long as they are in camera view). Often, a control box exists so that the camera view can be adjusted from a group view to individuals. In addition, there may be a document camera, a FAX machine and a VCR.

Although this setting has many similar characteristics to a traditional classroom, there are important differences. Although there is visual contact, in most cases only one site can be seen at a time. Therefore, there does not exist visual contact with all participants simultaneously. In addition, it is possible to sit out of camera view. Through the use of the overhead camera or by focusing the room camera on a flip chart, text and graphics can be transmitted, but the text needs to be brief and arranged so it can be seen on the screen. Because of this restriction, text and graphic materials must be created in advance. The expansiveness and spontaneity connected with the blackboard does not exist in the videoconferencing environment.

Therefore, at the very least, the lecture method needs some modification in the videoconferencing environment. Yet, the instructor could certainly assume the role of primary speaker in this setting, with students at site and at other locations taking notes or being faxed materials.

Yet, this environment also provides the opportunity for applying some of the techniques of process education, which many believe corresponds more closely to the way we really learn (Barrows and Tamblyn, 1980, p.1). Problem-based learning and cooperative learning provide many benefits for learning.

In problem-based learning, the student takes on a problem as a stimulus for learning in the areas, subjects or disciplines that are appropriate for the student at the time. In doing this, the student exercises or further develops his or her problem solving skills. This method of learning has two educational objectives: the acquisition of an integrated body of knowledge related to the problem, and the development or application of problem-solving skills (Barrows and Tamblyn, 1980).

There has been extensive research in support of cooperative learning. Cooperation among students typically results in (a) higher achievement and greater productivity, (b) more caring, supportive and committed relationships, and (c) greater psychological health, social competence and self-esteem (Johnson, Johnson and Smith, 1991). McKeachie et al (1986) has found that student participation, teacher encouragement and student-student interaction positively relate to improved critical thinking. These three activities confirm other research and theory stressing the importance of active practice, motivation and feedback in thinking skills as well as other skills. This confirms that discussions are superior to lectures in improving thinking and problem solving.

W. Edwards Deming has made a compelling case for the importance of cooperation and interdependence in his book, *The New Economics for Industry, Government and Education* (1993): "We have grown up in a climate of competition between people, teams, departments, divisions, pupils, schools, universities. We have been taught by economists that competition will solve our problems. Actually, competition, we see now, is destructive. It would be better if everyone would work together as a system, with the aim for everybody to win. What we need is cooperation and transformation to a new style of management... Competition leads to loss. People pulling in opposite directions on a rope only exhaust themselves: they go nowhere. What we need is cooperation. Every example of cooperation is one of benefit and gains to them that cooperate."

In the summer and fall of 1994, I had the opportunity to teach in a videoconferencing environment. Both courses involved using videoconferencing rooms provided by NYNEX and the students were NYNEX employees. I was in Albany with students, while other students were in Boston, Syracuse and Buffalo. Each location had two screens; microphones; a room camera and a document camera, both of which could be easily controlled by a control panel; a VCR and a FAX machine. Approximately eight students were at each site. The two courses taught were Business Math and Introduction to Issues in Telecommunications. These classes met a total of six to seven times over a 15-week term.

In the Business Math course, I incorporated both problem-based learning and cooperative learning. Two teams of four were formed at each site (with some variations depending on site size). Each team chose a leader and a recorder and these roles were rotated throughout the term. Students were also placed in pairs and some assignments were completed in pairs rather than the groups of four.

Minimal time was spent presenting the material: students were expected to prepare before class and assignments were mailed to me for review. During class, the focus was on group work and primarily student-proposed problems. In the early meetings, each site was asked to create a problem for another site to solve. The problem-posing site had to confirm whether the problem-solving site was correct and a third site was asked to confirm. Students came up with harder problems than I would have!

In addition, each student was asked to create a "real" problem for the class and then teams were given time to select from their group of four a team problem. These were gathered by me and became major problems for discussion and solving by teams during our meetings. Through this activity, students learned how to deal with problems that were often not as "neat" as textbook problems. Meaning needed to be clarified and, depending on the interpretation of the problem, there could be alternative solutions. Sometimes critical information was missing or extraneous information was given.

How effective was this approach? Certainly, there were few sleeping during this evening class. In addition, the submitted problem sets demonstrated generally good problem-solving skills. I know of several who have moved on to further study of mathematics.

In Introduction to Issues In Telecommunications, I again formed teams of four with the role of leader and recorder

rotated. Students were asked to mail in questions or pose them during class, although, in this class, I did propose most of the questions. The necessity to write them out in a format appropriate for the document camera did make this kind of preparation necessary.

Different techniques were used to discuss the questions: sometimes teams of two were asked to meet first and then form teams of four for further discussion. Often, especially when discussing concepts or terms, I asked the groups to pose a question for the whole group. When we "regathered," the leader (or sometimes recorder) of each group was asked to report either a summary of discussion, a key point or a question (the request varied). Sometimes, a list was formed and each group added to the list and/or commented on other groups' contributions.

Although there still were some students who contributed more than others in each of these classes, the methods used did spread out the participation and, in most classes, I heard at least once from each student. Because of the focus on student articulating their ideas, I believe that more true learning occurred. Because of the opportunity to share ideas less formally on site before discussion over the network, contributions over the network were more thoughtful and articulated better. Although there was no control group, I believe that the essays and problem sets submitted by students were enhanced by their opportunity to engage with the material in a very active sense during classes.

With cooperative learning, larger groups can be accommodated, since the activities allow for participation of students on a variety of levels. Although a student may not speak over the network many times, he or she is engaged in many discussions at the site. The instructor can see the results of that thinking and communicating in the submitted essays.

The videoconferencing environment provides the setting for exciting learning opportunities. Through the use of cooperative learning and problem-based learning, the individual site can become an environment for group interaction and problem-solving. Through the videoconferencing, insights and ideas can be shared across sites and with the facilitator, who can lead the whole group to a deeper understanding of the ideas presented. The potential richness of this environment is exciting as well as challenging.

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## **The Philosophy Motion - # 249 Toward the Long View: Woodpiles Forest Davis, Professor Emeritus**

In our salad days we thought the sensible thing to do was to pile wood against a building. It provided solid support for one end, and it allowed for close stacking which saved space. After a few years it appeared that the building didn't like this all that much. It picked up and moved in the other direction. One could say that the weight of the wood leaning against it caused it to move just a bit. One could say that, and it might have been so. On the other hand, if it didn't like having wood piled against it, presumably it would have expressed its annoyance by withdrawing from the association. That is what happened, so one infers that it didn't like being stacked against.

After that, in a burst of progressive thought, as one might say, it occurred to us to make freestanding pile-ends on the inside of the pile as had been done (of course) on the outside. That helped, but whom did it help? Well, it helped us, certainly. The building appeared to be appeased and not to feel the need to withdraw any more. It is hard to tell about things like that; buildings mostly don't move very fast when they move; after a while one simply notices that they are in a slightly different place. Buildings do move all the time; we all know that. Especially in Vermont, where the prevailing building movement is from north to south. It has to do with frost in the ground and the push that ensues when ice forming on the north side of a structure pushes a building southward toward the side which is not frozen yet. In the case of the woodpile the building moved east. This is not so easy to account for; it is why one came to feel that more complex factors were at work.

An additional dimension in wood behavior appeared in the tendency of wood taken from different parts of a pile to burn with different degrees of heat and different formation of by-products such as creosote. It appeared, after appropriate ratiocination, that the wood in a given rank of the pile was drying at different rates of speed, perhaps according to whether there was enough air movement at various levels and in various locations in the pile. So it seemed promising to set the ranks farther apart to allow for more movement of air.

We tried that for a few years. Each of these trial-and-error responses took several years to grasp, consider and address. So far in these reflections we suppose 25 or 30 years have gone by. There are 42 years, off and on, thus far, to account for in this place. It seemed to be about time to try something new. The prevailing winds in northern Vermont tend to be from west to east. It occurred to some pilers to try piling wood with the ranks so to speak on the bias, to allow for movement of air freely past them. Lately we have been trying this. The coming winters may show what conclusions can be drawn. Wood certainly modifies human behavior. Already wood is being set in freestanding ranks, a bit away from buildings, and on a bias which allows free flow of air in the prevailing direction. There are other characteristics which from time to time have insisted on coming to notice. Wood is clearly not through with us yet. It is very determined in defining what it requires that people consider.

Wood flows. This observation, first made many years ago, is now part of the accumulated wisdom concerning the characteristics and behaviors of wood which are passed on from time to time to persons of youthful age who are willing to learn about the finer things of life. Particularly in a pile, wood flows. This accounts for otherwise unexplained phenomena



such as the falling down of pile parts, and their leaning over here and there, in whatever direction, even south to north. It is helpful to allow for this by shifting a mid-piece off center till it touches the pile next to it at the plainly downhill point. This is very reassuring, and just mischievous enough to be rewarding. Two ranks next to each other once showed unmistakable tendencies to tip toward the center. A stick or two placed well back in the ranks did their duty very well; the ranks never did tip, though they occasioned some comment.

Then there are the problems associated with life forms in the midst of the wood wilderness. First and lowest down are the moles. These active small fry send up slow fountains of soft earth about whatever base there is, poles or stones, and within a measurable time it appears that the woodpile is settling - not very far, and not very fast; in a woodpile not much of anything happens rapidly unless it falls down, and even then there is a certain stately quality about it - but settling just a little, just the same. Then there are the mice. Mice build nests of dried grass in woodpiles, often two or three feet off the ground, in a hollow or open formation among the sticks. When one finds them they are always empty and very clean. That only means that one reaches them when the weather is already cold, so one is bringing in some pieces in the fall or winter, and the nests show up. One gets a reassuring feeling about mice from them, field mice, anyway. There is an order and a warmth and cleanliness about them which belies some of the reputations of mice. They appear to be the residences of agricultural mice rather than suburban or town mice. Of course this may all be a conceit.

Finally, there are the snakes. Snakes, the garden varieties one sees in Vermont, may be present personally, or they may have left their split skins and departed. These can be found as high as four or five feet off the ground in a rank of piled wood. What the snakes do is find a crevice of just the right width for them to squeeze in and lodge themselves in it, and then they wiggle out of their old skins and leave them there. Some quite nice residual snakeskins get left around to be found in this way. One summer recently there was an entire family of small snakes living in one of the sun-drenched ranks of piled wood. They kept showing up; if pieces were lifted off their level they merely regarded the intruders with detachment; sometimes they slid off somewhere lower down in the pile, sometimes not. They may have just stayed till they got around to going somewhere else. Later on, sure enough, they showed up under a different piece, on a lower level. Snakes must rather like woodpiles. They did not eat wood, evidently; they may have eaten insects if they found any. Sometimes there are insects in woodpiles, but fewer by far if the wood is dried and has stood for a while.

Of course if it has stood too long in the pile all bets are off. It is not a good idea to stack up too much wood for too long, without using it. Things do happen in woodpiles under those circumstances. A woodpile is a traveling time-shadow. It should stand a year to be dry, and then be used within two years. Everyone knows all that.

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## **Report on Sabbatical Leave, 9/94-2/95** **Lee Herman, Central New York Center**

### **1. Planned Reading/Study Projects**

Consistent with my plan I've become quite familiar with the current discussions and controversies in "neo-pragmatic" and "critical philosophy." I studied in-depth the work of and about Richard Rorty and Jurgen Habermas, including all the major writings of both. I also studied the background in intellectual and cultural history of their ideas, as well as work on their implications for social thought (e.g., Diggins, *The Promise of Pragmatism*). The study of Habermas took me back to the concept of "dialogue" and thus to resume my long-standing studies of the early and middle dialogues of Plato. In addition to the primary texts, I read a number of scholarly works pertinent to them (by Nussbaum, Teloh, Vlastos, Seeskin and Bernardete). A prominent aspect of those dialogues is Socratic irony, a tone or manner I've long tried to understand in teaching and mentoring. This curiosity led me to Wayne Booth's *A Rhetoric of Irony* and also to return to the "education novels" of Thomas Mann (the subject of my doctoral dissertation).

### **2. Writing Projects**

The study projects coalesced to some extent with the writing projects I had anticipated in my sabbatical plan. I've completed final drafts of "Timeliness and the Organization of Learning" (with Xenia Coulter), "The Authority of Uncertainty" (with Alan Mandell), "The Play of System and Lifeworld in Student-Centered Education" and "A Russian Education, July 1994." These have been sent out for publication. I've completed a second draft of "The Wisdom in the Dialogue" (which needs another revision before being sent anywhere) and am currently working on the first draft of "Learning All the Way Down...". I've also written sketches for several other essays; based on prior conference presentations and/or implications of the essays I've completed.

### **3. Unanticipated Projects**

a) The current Empire State College students at the New York Chiropractic College asked me to teach a course on film - "the movies." Unable to resist this appeal to one of my passions, I've been studying cinematic history and aesthetics and will be offering the course this spring.

b) I was invited to join the board of directors of SAVAR, a private, non-profit agency in Cayuga County that serves people who have been sexually assaulted. I've been learning the operations and services of that agency, as well as the social environment which requires them.

c) The negotiations between the Coalition for a Better Auburn/Cayuga County and the Auburn City Schools revived (see the community service section of my application last year for promotion). I am now participating in a project to create a school/community team to respond to intolerance incidents occurring in Auburn High School.

d) Linda Butler Livesay left, Kathy Coogan arrived in the Auburn Unit. I directed the process of selecting the new

administrative assistant, and, with Ms. Butler Livesay's invaluable help, managed the transition and planned Ms. Coogan's training. I have been recently working extensively with her to deal with some of the expected and unexpected problems of her life at the unit.

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## **Problem-Based Learning: Pathway to Commitment**

**Madeleine L. Van Hecke, Elmhurst, Illinois**

EDITOR'S NOTE: For those not familiar with the Perry Scheme, it is a theory of college student cognitive and ethical development created from interviews with undergraduates. In a very simplified form, it posits three major stages of development (or "positions") in college:

- 1) a dualistic phase where students seek the "right answer;"
- 2) a relativistic phase where students think that anyone's opinion is as good as anyone else's; and
- 3) a commitment stage where students take informed positions while acknowledging the tentative nature of all knowledge.

This article was reprinted with permission from the Spring, 1995 issue (Volume 17, No. 1) of *The Perry Network Newsletter*. Ms. Van Hecke is the editor of the newsletter.

Two major difficulties face those who hope to design courses based on the Perry Scheme. The first is the challenge of creatively structuring class activities and assignments in ways that aid students' epistemological development. This is especially true for students who are already at the level of "contextual relativism." Over the years, activities likely to encourage the development of dualistic and multiplicitic thinkers have been widely discussed, but few authors or researchers attempt to describe methods which encourage "commitment." The second challenge is the diversity of students in courses, often ranging from thinkers who are "dualistic" to "contextual relativists" in the same classroom.

In recent years, instructors across the country have become increasingly interested in an instructional approach called "Problem-Based Learning" or "PBL." Does PBL hold the promise of encouraging student development across the Perry positions, including Commitment? Is PBL more adaptable to classrooms in which students are at diverse levels of thinking?

### **What is Problem-Based Learning**

Imagine that you come to a workshop on problem-based learning. You are sitting in a large room filled with tables. The workshop instructor comes in and drops a packet of materials on each table. You learn that you and your colleagues are members of a personnel committee and will be considering the case of a teacher who has been criticized by students for her unorthodox teaching methods.

In the packet you find the teacher's personnel file, which includes statements from disgruntled students, a review letter by her department chair, and a statement of her philosophy of teaching which argues that she is using problem-based learning combined with innovative approaches to appeal to "right-brained" students. You are informed that as a member of the personnel committee, you will be asked at the end of the day to vote on what action to take regarding this teacher's contract: renewal, for one year only (a terminal contract) or termination at the end of this school year. You will also be asked to write an opinion regarding the case which will be submitted to the teacher along with whatever decision the

committee makes.

"There isn't sufficient information to make this decision!" one member of your group complains. "You can't tell from this how widespread the dissatisfaction is - are any students finding her approach valuable?" "Do you know anything about this right-brain stuff?" "How can I decide what I think when all I know about problem-based learning is what's in two paragraphs in this teacher's philosophy of teaching statement?" says another.

Well, of course, you can't - and that's the point of problem-based learning. Students are presented with a "life-like" situation - ambiguous, with insufficient information - and then asked to assume some role in which they must take an action or make a decision. Left alone at this point to figure out what to do, they might easily flounder. The PBL approach adds a strategy to help them sort out what to do next: it has members of your group generate two lists under the deceptively simple headings, "What do we know?" and "What do we need to know?"

You notice two interesting phenomena during the ensuing discussion. First, it isn't always easy to classify the group's ideas under one heading or another. "Facts" that members of the group "know" have a disconcerting way of appearing more debatable as the discussion continues, some slipping ultimately into the "need to know" column.

Finally, it occurs to you that some of the information you need to know is about the particular situation - this teacher, what she is doing in her classroom, what her students are like, and so forth. Other information is available in the public domain: for example, information on what problem-based learning is, and research about how successful it has been, with whom, under what conditions.

The instructor has advised your group that you will have a two hour break during which members can go to the library and seek out some of the information you have listed under "need to know." Someone at your table says: "I would never make a decision like this without seeing the teacher actually teach." "Oh," says the workshop instructor. "I might have a videotape of her teaching." She returns a moment later with a tape and a room where you can view it. "Since you only have two hours, you might want to divide up the work that needs to be done," she says, wandering away.

When you return two hours later, your group has learned quite a bit about PBL and about right-brain theory but also realize that what they have learned is only the tip of the iceberg. What they have learned has generated more "need to know" questions than they had before. Something similar has happened in the area of information related to the particular case. One member who viewed the teacher's videotape says: "Before I saw that, I was really on this teacher's side - I thought here's another young, innovative, creative person who's getting crucified by the students because she wants to get them to think for themselves - but ..."

As so often happens in real life, the complexity of the problem becomes more apparent as the group learns more about it. In mid-afternoon, the workshop instructor asks each table to generate a "statement of the problem." As groups report back, you are amazed at the diversity: "The problem is that this teacher has not learned how to present a case to justify her teaching methods to a personnel committee - the committee can't be expected to investigate..." "The problem is that today's students don't care..." "The problem is that we lack meaningful teacher-training programs at the college level..." "The problem is that the teacher didn't take the students' different developmental levels into account..."

This hypothetical workshop has attempted to simulate for workshop participants the experience that students in a problem-based learning class might have. While there are numerous variations, the heart of PBL is that students are presented with an ill-defined problem to which they return again and again - redefining what they know and need to know, redefining what the problem itself is - in a context which requires them to play a particular role and make a decision within a limited time frame. In this sense, PBL requires "commitment." Ultimately, the students recognize the complexity of the problem they are dealing with, yet realize that a decision must be made - even though they cannot be sure it is the "right" decision. It can only be the best decision they can make under the circumstances, open to revision and therefore, potentially, open to later regret.

On the other hand, the structure of generating "need to know" questions appeals to the most dualistic-thinking students and pursuing the answers to those questions is the kind of task that makes sense to students at all levels. Because PBL involves group work structured in this way, students who are less developmentally advanced have the opportunity to hear

more open-minded discussions guided by the questions: What do we know? How do we know that? They can see firsthand that it is the nature of an authentic problem which creates difficulties and not some arbitrary rules set by a teacher. For example, questions like "How many references do we have to have?" simply don't occur when students are grappling with an authentic problem, because they themselves realize that the question makes no sense in this context. They need to have as many references as they need in order to make an informed decision within the time constraints presented by the problem.

It is perhaps easy to see why the PBL approach developed in medical education. It lends itself easily to the "real life" scenarios faced by medical professionals, teaching them problem solving and critical thinking skills along with factual information. Yet the very nature of the "messy," ill-structured problems favored by PBL means that they require an interdisciplinary approach to be effectively solved. Typically problems are not only interdisciplinary in nature, but also include an ethical component. In some instances, instructors have maximized the interdisciplinary emphasis by having students enrolled in different courses ("course clusters") consider the same problem. For example, North Central College instructors in social psychology, economics and accounting developed a problem that students in these respective classes worked on. The courses were scheduled at the same time period so that some class meetings could involve all three groups of students who then shared information from the perspective of their disciplines.

Problem-based learning approaches vary along a number of dimensions. Sometimes entire courses are structured around a single problem; other times, one or two briefer problems are included in a course. Often, as in the workshop example of evaluating the teacher, the problems are basically simulations: "You are a specialist in pediatrics at a large hospital..." one classic PBL problem begins. Others are designed to address an actual "real-life" problem, such as the social psychology class who was asked by the director of counseling at the university to determine why so few students used the counseling center and to recommend what could be done about it. The degree to which the course instructor has information available also varies, as do the means of evaluating student performance.

As with so many less traditional teaching approaches, the concern and caveat about "covering the material" emerges when PBL is described. Perhaps the greatest challenge to instructors of problem-based learning is designing meaningful problems that will inevitably lead the students to discover the information that would ordinarily be "covered" in the course. The creativity of some instructors in this regard is remarkable. One statistics professor began a problem related to probability theory with these words: "Nancy Ames, 35 years old, has been depressed for several weeks and must decide whether or not to take an antidepressant drug called Prozac." Clearly, the statistics' students who must advise Nancy will learn something about both the power and limits of statistical information and probability theory as they make and defend their decision. They will learn something about statistics, a bit about medical research and depression and perhaps a great deal about the human condition and the nature of knowledge.

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## **Is Problem-Based Learning Really New**

Solving problems has long been a standard approach in many disciplines. Even the use of complicated and ill-structured problems, as in case studies, is common in many fields. What is so innovative about PBL? Proponents of problem-based learning argue that two features distinguish it from more traditional approaches.

### **1. The Presentation of the Problem First**

Typically, students are required to read a chapter, study a theory, or investigate an issue first. Then they are presented with a problem, such as a case study, and are told: "Use the three management theories we have studied to analyze this case." By introducing the problem first, PBL encourages students to discover what they need to know in order to solve the problem. And, in the process, to discover problem-solving methods that they can apply in a variety of settings. The hope is that the "need to know" questions will send students searching for the theories and information which will help them. The problem investigation is thus seen as more natural. Rather than giving an assignment which creates an artificial situation in which students study something which they then use because the instructor requires that they do so, the demands in PBL come from the problem itself.

### **2. The Authentic Nature of the Problems**

PBL instructors often find their problems in newspaper columns. Rather than making up a case so that they can insure that the theories in the course can be easily fitted to it, PBL instructors use or simulate "real" problems. Even a "brief" problem in a PBL course will require a few days of the students' time to investigate. PBL problems are always complex enough that the nature of the problem will change somewhat as the students pursue it. The "messiness" of the problem... not only makes the learning experience more challenging, but it casts the teacher genuinely into the role of a fellow-learner. Unable to be an "expert" on all aspects of the problem, the teacher becomes someone who simply knows more about one of the fields of study relevant to the problem.

ALL ABOUT  
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## **Writing the Uninspiring Biology Textbook** **David A. Livesay, Central New York Center**

We all know that nothing stimulates learning like an inspiring textbook, but if learning biology were easy, everyone would want to do it. This would mean not only that there might be more competition for professional positions in the biological sciences, but it would also result in a higher awareness of biological issues among citizens and policy makers. We would no longer be the exclusive guardians of the facts of life! Furthermore, society would lose another barrier preventing individuals with imagination and humanity from entering medical schools. Therefore, care must be taken to avoid writing that is informative, exciting, or in any other sense inspiring. While this is admittedly no easy task, I will attempt to provide a few simple rules which, if followed conscientiously, should go a long way in avoiding writing that is in any way inspiring.

### **Rule one: Make the subject seem as uninteresting as possible**

This is our greatest single challenge as textbook writers. The phenomenon of life is so intrinsically interesting, so filled with mystery and beauty, and manifested in such wonderfully complex and diverse forms, that it is easy to allow one's personal sense of excitement to betray one into fits of enthusiasm. Enthusiasm is to be scrupulously avoided lest it be conveyed to the reader. Fortunately, most institutions of higher learning today provide their faculty with laboratories to which they can retire and perform arcane, repetitive experiments for hours on end. Research, writing professional journal articles and serving on committees are sure-fire ways to subdue any feelings of enthusiasm that may arise.

Furthermore, it must not be assumed that the reader lacks a sense of enthusiasm, awe or wonder at the outset. Everyday experience can, in some cases, bring people into contact with awe-inspiring biological phenomena, such as birth, growth and death. Some readers may have even wondered about that mysterious quality of life whereby, once it has been extinguished, it can never again be rekindled. Ponderings such as this may lead to fascination, appreciation and in some cases even respect for life. These are powerful feelings indeed, so they demand powerful countermeasures. Some time-honored techniques include the following:

- Produce long lists of characteristics of living things in terms that are as technical and unrecognizable as possible. If possible, use a table, as narrative prose can sometimes degenerate into good writing, especially when dealing with interesting subjects.
- Use esoteric terminology relentlessly. If you insist on writing prose, lace it liberally with jargon from beginning to end. If scientific terminology is introduced gradually, readers may catch on to its meaning and become comfortable with it. If you must, provide a glossary at the end of the book, but never define terms in context or provide familiar examples. Examples should be as obscure as possible, and definitions should be highly technical.
- Whenever possible, compare life to a set of chemical reactions. Life processes may have an air of familiarity to some readers, but chemistry is more likely to be abstract, foreign, alienating and inaccessible: in a word, uninspiring.



### **Rule two: Represent the scientific enterprise as routine and formulaic**

Historically, science has been a pretty exciting endeavor. Scientists have gone everywhere and risked everything in the pursuit of knowledge, but this perspective is almost sure to be inspiring. Hence, science should always be presented as something that happens in the laboratory, under rigorously controlled conditions. Also be careful to avoid mentioning the role of creativity, or having feelings. Remember: scientists never play hunches. They test hypotheses.

Remind the reader that science is something only professionals can do, and only with sophisticated instruments and massive funding. Refer to "the scientific method" whenever possible, and if you define this term, remember, as always, your definition should be both technical and abstract.

### **Rule three: Make analogies as obscure as possible, even at the expense of accuracy.**

Few things can be as inspiring as a good analogy; therefore, one has to be careful to avoid them. Don't make comparisons between the concepts you want to explain and a concept that might be familiar to the reader. For example, for a generation raised on Spuds McKenzie, it might be useful to compare a *Hyracotherium* to Spuds. However, biological tradition wisely demands that we instead compare this animal to a fox terrier. It is almost certain that not one reader in a hundred has ever seen a fox terrier, so this is a much safer comparison to make. The fact that the fox terrier is much smaller than a *Hyracotherium* makes it even safer, because it will mislead those rare individuals who might be familiar with fox terriers.

### **Rule four: Make your textbook just like everyone else's**

We must all make a gentleman's agreement to stick to the time-tested formulas of our predecessors, using the same approach, covering the same topics, using the same examples, and the same tired metaphors. Excessive experimentation with new approaches will lead to diversity and spawn confusion. Where would we be if we could not use textbooks interchangeably? It would soon be impossible to adopt a new textbook without reading it first! Furthermore, such a diversity may accommodate the needs of different audiences, leading to inspiration, stimulation and possibly even learning.

The modern biology textbook didn't just happen overnight. It has taken years to carefully expunge enthusiasm and wonder from the medium. It is a highly evolved form of writing, and excessive tinkering may result in textbooks that are new and different: maybe even exciting.

The best way to avoid novelty and innovation is to confine your research to other biology textbooks. Primary sources should be avoided because they may expose errors which would otherwise be perpetuated. They may also expose you unnecessarily to the enthusiasm that some investigators inadvertently convey in reporting their findings.

### **Rule Five: Use mnemonic devices rather than substantive, contextual explanations**

There is hardly any fact so obscure that it can't be committed to memory through the use of a good mnemonic. This way, abstruse, inconsequential facts can be made to stand out like oases in a desert. This is sure to prevent readers from having any idea how to connect the few facts they do remember, and leaves them with the overall impression that biology consists entirely of a few obscure, unrelated facts which have nothing to do with their everyday lives.

## **Conclusion**

Writing a biology text that is totally devoid of inspiration is not an easy task, but, as professionals, it is a task we must all rise to. Fortunately, we are not alone. As long as our brethren in physics and chemistry continue to practice the same high standards of uninspiring writing and teaching, we can continue to use the argument that biology is nothing more than applied physics and chemistry. As long as our readers dislike these subjects, we can be reasonably sure they will never enjoy biology.

ALL ABOUT  
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## **Book Review** **Chris Rounds, Central New York Center**

Hedrick Smith, *Rethinking America: A New Game Plan from the American Innovators: Schools, Businesses, People, Work*. Random House, 1995.

Try to get past the title of this book. The author isn't Newt Gingrich, and it's not an ode to corporate or governmental reorganization. Smith is a journalist familiar to viewers of "Washington Week in Review". His previous books grew out of experiences as a *New York Times* correspondent in Moscow (*The Russians*) and Washington (*The Power Game*). Many of the themes elaborated here were explored in the PBS series "Challenge to America". *Rethinking America* should prove useful to students interested in understanding the roots of our nation's contemporary struggles to revitalize corporate and educational institutions. I also found it thought-provoking in the way that it cast light on our college, the values that underlie it and the ways in which power is shared and decisions made within it. The work is saved from dryness [and the reader from depression] by clean writing, Smith's unerring journalistic ability to bring case studies to life, and an international perspective that draws examples from Germany and Japan as well as from the U.S.

At the heart of this book is the question of international competitiveness... how American corporations squandered the lead they enjoyed after World War II, and what some innovators are doing to regain ground lost during the last two decades. Smith's approach is comparative... exploring differences in corporate attitudes, educational systems, financial structures and labor-management relations among the three nations involved. He argues that American institutions that prove themselves capable of responding to the challenges posed by the Japanese and Germans are likely to thrive while those which cling to centralized decision-making and obsession with short term gains and quick fixes can be expected to wither in this new environment.

The author's comparative look at GM and Toyota covers familiar territory for those aware of the management literature, but provides a useful overview and summary while establishing themes which will recur throughout the text. Toyota's ability to integrate workers in the decision-making process, its reliance on a "bottom-up" approach to innovation and its focus on the use of technology to enhance worker productivity in an environment of trust and security are presented as characteristic of the Japanese industrial system at its best. Smith contrasts this Japanese approach with Roger Smith's experience at GM during the 1980s, when massive investments in technology were juxtaposed with radical cutbacks in the workforce... a mix sure to reinforce labor's hostile reaction to the new technology. While GM's CEO was touting robotics as the silver bullet sure to return his corporation to its familiar position of dominance, Toyota epitomized attention to improving the details of production every day.

Smith goes on to note the key role played by finance capital in the German, Japanese and American cultures. He contrasts the "patient capital" available to German and Japanese corporations with the American corporations' dependence on a stock market obsessed with immediate return on investment. Little wonder that so many CEO's seem willing to sacrifice the long-term good will of their employees in search of the balance sheet improvements that Wall Street equates with increased productivity.

Schools, and the relationship between education and global competitiveness, provide a significant subplot for this book, and help to broaden its appeal. Smith wants to know how well American schools are doing at preparing the next generation of corporate employees, and he contrasts what he finds in the U.S. with visits to elementary and secondary schools in Japan and Germany. Rather than focusing on the "gifted and talented" or those likely not to graduate at all, the "neglected majority" interests Smith most... and what he finds is depressing. Our habit of emphasizing right answers, and our tendency to label kids, even at the earliest grade levels, has led American schools, in Smith's view, to concentrate on their brighter students to the detriment of "average" kids who both make up the majority and will provide the core of the next century's workforce. This approach, which might have been good enough for an earlier generation when a demand existed for production workers with good work habits and a high tolerance for repetitive manual tasks, bodes ill for a new century when good habits will land you a job at McDonald's and most jobs that might have a future will require real technical skills coupled with a willingness and ability to learn continuously.

Smith finds a promising alternative approach at Central Park East Secondary School (CPESS)... where the emphasis is on meaningful education built on close working relationships between students and teachers. Principle Deborah Meier is at the heart of this progressive effort: "Being educated is making connections, being conscious of society, of people's motivations. It is habits of mind which distinguish educated and civilized behavior from uneducated and uncivilized behavior (quoted in Smith, p. 155)."

In Smith's words, "At CPESS, the object is to make students the activists - pushing their own learning curve, with teachers as catalysts and coaches but never lecturing to a room of students..." (p. 163). Putting teachers in charge of their work, emphasizing close working relationships between faculty, students and families... focusing on learning in depth, this is heady stuff to which Smith provides a provocative introduction. More can be found in Deborah Meier's *The Power of Their Ideas* (Beacon, 1995) and Ted Sizer's *Horace's Compromise* (Houghton Mifflin, 1992).

Hedrick Smith tells an exciting story, and his conclusions will warm the hearts of liberals and academics... His emphasis on investing in people, on democratizing organizational structures, and on human scale in organizations...these are things we love to hear! And my sense is that his arguments are pretty firmly rooted in the experience of people with more than a journalistic familiarity with the issues at hand. Smith is a synthesizer and a popularizer... but his work, which is well footnoted, should provide students with a thought-provoking overview of several issues critical to their community's future. For many students, battered by wave after wave of downsizing and deeply familiar with institutional indifference to the welfare of individuals, Smith's apparent optimism and his emphasis on the transformational possibilities inherent in his case studies might be a bit hard to take. The tide of events in Washington and Albany certainly doesn't seem to bode well for people-centered innovation. And yet those corporate and educational entrepreneurs are thriving, and the institutions they've built work... So maybe there is an alternative to despair and victimhood... and maybe, if we acted as if we were free, our students might be inclined to come along for the ride.

ALL ABOUT  
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## **Mentoring Across the Continent** **Amnon Orent, Israel, Center for International Programs**

It has been a long road these past 16 years working with so many students both in New York and in Israel. Now that I am looking forward to my retirement in the summer of 1995, as one of the mentor/coordinators of the Israel Program, I am feeling pre-retirement nostalgia which prompts me to think about some of my experiences as a mentor.

I certainly have had a tremendous variety of students during my tenure at Empire State College. In the early years it was the junior year abroad student who came to Israel from the USA for an educational/recreational adventure and who was desirous of "not wasting" a year of college credits. These students often took advantage of the field placement situations which we provided them in development towns, kibbutzim, moshavim, and special situations in cities such as workshops for the elderly and neighborhood youth centers.

Two outstanding events remain fixed in my mind from that period. The first event concerned a young woman who came from upstate New York and had been searching for an appropriate educational program in Israel. She had heard about Empire State College in New York and she was amazed that there was a program in Israel. She wanted a degree in midwifery. It took me some time to explain to her that the College could not offer that option and that in any case she needed to earn an RN degree before she could even consider the program she wanted.

Back and forth for weeks we went. Finally, she got the point and said "...why don't I get a degree in community & human services, with a concentration in comparative birthing processes?" I must say that initially I was very impressed because she had learned the Empire State College lingo and she could articulate a reasonable proposal. On second thought I asked her where could she do this. She said, "I will go to the Bedouin Arabs in the Sinai and learn about how they have babies."

"Wait a minute," said a highly-concerned mentor who knows something about desert living conditions in the Sinai; to say nothing about how the Moslem Bedouin would receive a single woman who walked around with a minimal amount of clothing. Said she to me, "Don't worry, I'll take care of it and I'll call you." About a month later she phoned to say that she was calling from a medical field station in the Sinai where she acted as an unpaid assistant to an Israeli doctor who was doing public health for the Bedouin as part of his residency program. She explained that she was learning to take blood pressure, blood samples, urine samples, how to bandage wounds and she was interviewing women to ask about birthing practices. Needless to say, this was a highly independent learner. As far as I was concerned I had to check it out with the doctor (whose name was Amnon; was this some kind of magical transference from student to mentor?) and I had to find an appropriate mentor from the health sciences.

We had all these things worked out when one day I received a telephone call from the military governor of the Sinai region. (It was still under Israeli control in those days.) He wanted to know what is this crazy woman doing down here? What is Empire State College? How could we allow her to live under these conditions?

I had some explaining to do and in the end he permitted her to stay. The point of this story is that I saw myself as the luckiest mentor in the world. Could one have a more independent student than this young woman, and could one have a

more dramatic situation for a learning experience than what she had created in the Sinai desert?

The second situation concerned a transfer student from the Metropolitan Center. She wanted to do an anthropological study of the Bedouin in Petra, Jordan. Petra is a world famous archaeological site. The reader must appreciate my shock at this proposal because Jordan was off limits to anyone who had been in Israel prior to coming to that Kingdom. People had lost their lives trying to get to Petra in the past. There was nothing I could do to dissuade her from her project. She wanted to do a study of the effects of tourism on the natives of Petra, a perfectly valid and legitimate investigation.

"But, how will you get there from Israel?" I asked her. "Don't worry, I'll find a way," was her response. And here is what she did. She notified her photography friends in New York City, a young couple, who joined her in Egypt. They took a ferry from Port Suez to Aqaba, Jordan, a long hot sail through the Red Sea, and arrived to be informed that there was something wrong with her visa. The Jordanians would not let her enter the country. She went back to Egypt, with the same ferry (the captain did not charge her), where she fixed up the problematic visa, and one week later she returned to Jordan to begin a four-month field study. She and her friends lived in a cave near Petra and they took hundreds of slides during their stay. As part of her learning contract she wrote an excellent commentary on the anthropological aspects of the pictures. When she completed the project she and her friends returned to Israel where she gave a few public showings of the slides together with her commentary which was very well received by packed audiences. When she returned to the Metropolitan Center, she also gave a few showings of the slides in New York City where she spoke about her field work to highly appreciative audiences.

These are just some examples of the highly original and independent work of some of my students in the past. When I returned to New York for a two-year stay at the Hudson Valley Regional Center, as it was called in those days, I was assigned to work in Middletown, N.Y. My experiences there were very typical for most of my colleagues throughout the state, however, the radical shift from a mentorial perspective was the one day a week assignment to the Federal Prison in Otisville.

Working with these inmates for two years allowed me to develop a new sense of appreciation of the negative effects that society has on its members, and how socially destructive these forces can be. It was also an object lesson for me on how selective these forces can be on certain ethnic and racial groups. It is one thing to read about crime in the newspapers and to watch it from a director's perspective in the movies, and quite another to hear about it from inmates in a prison. Whenever I think of this experience I always have a sense of emptiness because I have never followed up on whether or not the degrees that I helped these people earn in any way helped them to extract themselves from the social structural rut in which they found themselves. Sometimes I think that I learned more from these incarcerated men than they learned from me. In some ways it was a privilege to have been able to work with them.

Upon returning to Israel, I noticed a slow shift of the student body from the year abroad students to those Americans who had been living in Israel for many years and who never completed their B.A. in the USA. This was the more typical student with which we are familiar in New York: thirty-something, married with children, working full-time and well into a career. They felt stuck in many ways because they could not progress in their specialty due to the lack of a formal undergraduate degree. The parallel with their cohort in New York was striking. Initially, one heard the same level of frustration. "I don't know why I have to do this. I already know my field on a professional level but my employer won't give me the next promotion without a college degree."

My gratification as a mentor came with such comments as, "This is terrific. I never thought that I could derive so much pleasure and satisfaction from studying on my own with a mentor." "This has been one of the most enlightening experiences of my life." "I never thought that education could be so liberal and that a college would allow me to find my own way. This is the way education ought to be."

Those years brought especially good results for which the college as a whole ought to feel quite proud. Some alumni from that period went on to graduate school and succeeded quite well. Ammiel Alkcalay is now a professor of comparative literature at Queens College, CUNY (Ph.D., CUNY); Amos Ron is the marketing director for the largest paint manufacturer in Israel (M.B.A., Hebrew University); Sarita Cina is the regional director for counseling services in the Galilee (M.A., University of Haifa); Mike Rosenberg is the director of youth programs for the Reform Movement in Israel (M.A., Hebrew University); Haim Shocham is the general consul in Chicago for the State of Israel (Graduate of the

Foreign Ministry Program for Diplomatic Service, Israel). Stephanie Krone Firestone (M.A., University of Virginia) was a legislative assistant to Senator Lautenberg while working on the Committee on Environment & Public Works in Washington, D.C. Today she is the founder and director of ECOLINK ISRAEL, an environmental field work-study program in northern Israel.

I wouldn't want anyone to think that I think that the sine qua non of studying at Empire State College is going to graduate school. The students who have gone on to build careers for themselves after attaining their degree at Empire State College without going on to graduate school are also quite impressive and what they have done is by no means, and in any way, less of an achievement. Thus, Reuben Zalk has built a successful computer company in Jerusalem; Judith Sander (RN) is a cardiac specialist in ER at Hadassah Hospital; Rosylyn Feldman is head nurse of pediatrics at Sharei Zedek Hospital; Faith Prowisor Sugarman is a special education teacher in Jerusalem; Valerie Carr is a neighborhood youth worker for the city of Jerusalem. The list of achievements goes on. It's a small program and we have had about 400 graduates since its inception in 1977. We have served literally some thousands of students since then, most of whom have earned credits for transferring to their home schools in the USA.

In 1987 it was time to return to New York once again and this time I worked in Hartsdale. The catchment area for this center had a more upward mobile and diverse population of students. One man had almost completed his M.A. degree at the School of Theater Arts, Yale University, when they discovered that he had never completed his B.A. Even at this late juncture they were not inclined to overlook this fact because Yale has in its bylaws a rule that forbids the issuance of the M.A. without a valid B.A. It was a pleasure to help him pull together his many years of Broadway theater experience for prior learning credit and then to create a degree program plan in the arts. He did this in one year and the following year he could graduate from Yale with an M.A.

Another fascinating student was the chief of police of a small town in upstate New York who had always wanted to be an Episcopal priest. He had taken many courses in theology at the Episcopal training center in NYC but they would not let him put his name forward for the priesthood without a college degree. And so I had an opportunity to learn about Christianity while helping him to design a college program around his vocation of helping those in need through fostering belief in the possibilities of a better world. He wanted to serve his community which was in need of dedicated leadership.

It did not escape me that in Israel I was usually giving my services as an educator to the Jewish community and in particular the ultra-orthodox. Now I was in New York working to help someone enter the priesthood. Under what kind of heavenly star was I working, I wondered at the time. At that juncture of my life I was going through some rather difficult times because we were living in Connecticut and my mother-in-law was suffering the final agonies of cancer. The least I could do was to offer my emotional support to my wife and her family. The reason I mention this is that while working with the novice priest in Hartsdale I could share some of my feelings about this tragedy with him and I remember his kind words to this day. This was another lesson to me of how much we as mentors can learn from our students.

The Hartsdale experience did have a common theme in terms of the kinds of students I served. I learned to feel the pain and stress of men and women in our society who were desperate to change their lives. Individuals who wanted to get out of locked-in situations where they saw no future for themselves. This was often after a difficult divorce or after losing a job. These unplanned for and unexpected changes in their lives allowed them to explore new educational options. I honestly believe that by working with them and helping them to seek new directions which were really always part of their inner worlds anyway, I added another dimension to the role of the Empire State College mentor. I am not naive enough to think that other mentors don't experience similar situations. It is just that I must say that I don't think that there is any other occupation that would allow one to be involved with so many aspects of people's lives as that of the mentor at Empire State College.

My mentoring at Hartsdale also exposed me to the world of the NYPD and their colleagues in Westchester County and environs. These were men who had built careers in law enforcement and they were now in line to move up within the system but they were denied the opportunity because they never completed a college degree. There were those who wanted to go to law school but did not have the entry requirements. These policemen were another significant group of people who I mentored in my New York days. These were the Hill Street Blues upward bound.

In 1989 it was time to return to Jerusalem. Once again I noticed a shift in the kinds of students that were

attracted to the program. There was a noticeable increase in students who came from the ultra-orthodox Jewish community in New York. Men who had spent a good part of their young lives in yeshivas (rabbinical training centers), and women who had life-long learning in Jewish religious schools which led them to teacher training seminaries that were not accredited by the secular educational system in New York or in other states. Some of these people had taken formal college courses in accredited secular institutions; however, most of my work was involved in helping them to design valid plans of studies which were not unduly heavy with theological studies. It seems to me that the most common phrase that I used continuously for the past few years was "breadth of studies."

It was at this time that I noticed a new trend in the choice of concentration amongst my religious students. In the past many of them had chosen educational studies with no specific focus. This time students were asking for degrees in special educational studies with a concentration in speech and hearing problems. My curiosity about the origins of this new demand brought to my attention the fact that the ultra-orthodox school system (there are parallel educational systems in Israel) had only recently instituted special educational programs and that speech and hearing problems was one topic for which there was a noticeable need. One of our students had brought this to the attention of one other student and soon I had a need to hire two speech specialists to work with the increased demand for this specialty. It has been two years since we began this trend and by now we had six students complete their studies with us and all of them have gone on to work towards a master's degree in speech and hearing problems. It seems that the business adage of "find a void and fill the vacuum" applies to education as well.

During this time I was pleased to note that some of my students from New York, two Israelis in particular, decided to return to Israel to complete their studies at Empire State College. One of them, Dganit Livne, had just completed a photographic safari in Guatemala which we then built around a course in ethnographic photography. She had cleverly taken a summer course with Mel Rosenthal which had prepared her for this assignment. The other student, Oranit Klein, had recently spent six months in India where she and her boyfriend had completed a video interview with the Dalai Lama which was then viewed on Israeli television. We designed an ethnographic reading course based on what she had seen in India. It was one of the most meaningful experientially-based courses I had ever had the opportunity to develop with a student. By the way, she and her boyfriend married soon after and today she is expecting a baby.

It seems to me that past events just fold into present ones and that when one works with a program as long as I have continuity becomes part of the landscape. My former student who had been to India has recently completed her M.A. in communications at the Hebrew University and she is now doing her doctoral studies in the same department. Furthermore, she is currently acting as a tutor for some of our students in Jerusalem. I find this continuity especially gratifying and that it creates a kind of Empire State College family situation.

But this is not an isolated event. Other former students have also come back to us and are now tutors for our current students. Devora Zimmerman Weiner (SM&T) completed her M.A. in computers and earned a CPA in New York at the same time. Chanan BenDov (BM&E) earned his M.B.A. and he is tutoring some of our business students. David Smith (SM&T) completed an M.A. in education at the Hebrew University where he is currently a doctoral candidate. He is tutoring for us in the field of computers in education. Judy Eliasov (C&HS) is a graduate of the Metropolitan Center. She then went on to earn an M.S.W. in New York. Currently she is working with some of our students in human development.

The list goes on and if the reader detects a bit of Empire State College pride in all of this then you are correct. These few paragraphs reflect a long odyssey which could also be titled "One mentor's experiences in international learning". It has been a highly gratifying experience from a personal point of view. I think that the most meaningful aspect of this period of family life is what I have learned from working with such a variety of learners. I have had moments of despair and utter frustration which sometimes turned around when a student came through with such total success that I was completely humbled by my previous opinion of her. How could I have missed such inner light and commitment to learning? Such moments found me searching for blind spots in my own ability to assess people correctly from an academic point of view. I had to revise my own ways of looking and listening more than a few times. I am convinced that I have learned more from such experiences than from any other. I have also felt privileged to work with some students who came to my desk with such infectious enthusiasm which continued throughout their time at Empire State College. All in all I consider myself a very lucky mentor and I feel that I owe a debt of gratitude to both the students and the College which made it all happen.

ALL ABOUT  
**MENTORING**  
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## MI NEWS - September 1995

### MI Update

A major project, "Working with Students/Things that Work," is underway. With the assistance of MI and ALPLC representatives, centers will share and discuss some of their favorite methods of mentoring students during one of the early fall center meetings. The institute will then organize these materials so as to develop a source book for the whole college. More details about the project were described in a recent issue of *Exchange*.

### All About Mentoring Submissions

In this issue we experiment with two new types of submission - an actual and unexpurgated sabbatical report (straight from the hard drive) and an article reprinted from another newsletter that we thought might be of interest to mentors at Empire State College. We hope to make sabbatical reports a regular feature of *All About Mentoring* for a number of reasons: to share what our colleagues are doing, to provide an outlet for reports that otherwise languish in a file somewhere, and to encourage everyone eligible to apply when the time comes. We also hope to be able to include in each issue at least one article by people from other institutions - partly to stimulate new ideas and partly just for fun. Now for the pitch: We want your contributions! We want your sabbatical reports and articles you read that we can reprint; moreover, we want any and everything else! Materials prepared for conferences, arguments you developed or stories you invented in the middle of the night, drafts of possible publications, comments on books you've read, case studies of students or descriptions of learning issues, or writings you prepared just for this newsletter. What interests you is certainly of interest to us!

We are eager to share our newsletter with colleagues outside the College. If you know of people or institutions who should be placed on our mail list, please contact either Chris Rounds ([crounds@sescva.esc.edu](mailto:crounds@sescva.esc.edu)) or Xenia Coulter ([xcoulter@sescva.esc.edu](mailto:xcoulter@sescva.esc.edu)), and we'll make sure that copies are automatically sent to them. Many thanks!

### The Mentoring Institute Co-Chair

Come next January, it will be time for a new co-chair to take Chris Rounds's position. We hope that many of you will consider applying for it. So much opportunity exists and so many projects are possible that the position can be tailored to your own interests - much as our learning contracts can be designed to match the student. Please give the co-chair position some thought; if you have questions or want further information, don't hesitate to contact Chris or Xenia.

### The "New" Mentoring Handbook

The updating of the *Mentoring Handbook* was stalled by concerns about the current and projected budget cuts. Do we need it anymore? Will we ever be able to hire anyone? we were asked. Our (uninformed) reaction is to be ever optimistic about the prospect of new colleagues. Besides, there are currently mentors on board who have never seen or read or even heard of the old handbook. Furthermore, after 10 or even 15 years, mentors still testify to learning new facts about the College that they had previously never heard of. So, we would like to move forward on this project. Are any of you interested in taking part? Again, there is so much to be done that anyone with an itch to explain some feature of the College would be most welcome. Please contact your center MI representative if you have ideas or are willing to donate some time, even if just a little bit, to this long overdue endeavor.