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Introduction

Last year, given the events of Fall 2001 and the impact on the college, we were thankful for the spirit that brought forth articles for Inquirer. This year, given world events, we are even more amazed at the quality and vitality of the articles we've received. While the world as an enterprise is struggling, BMCC seems to get stronger. To what do we attribute that? The teaching learning enterprise is restorative and energizing. We can only hope that in countries devastated by war, famine, or oppression and about to begin the process of rebuilding, wise people will focus efforts on restoring and rebuilding schools and universities. BMCC is an example of the power of education. Putting teachers and students into safe, book-filled, and curriculum rich classrooms restores people's spirit, gives energy, and builds a future like nothing else.

A number of articles focus on strengthening course curriculum through challenging and rewarding writing activities. Mona Moss writes about writing assignments in her psychology class that fostered students' ability to see multiple perspectives in everyday issues related to developmental psychology. Klement Teixeira and Karen Steinmayer document the use of low- and high-stakes writing assignments that helped students learn about statistics. Annie Han reports on how a research project into the history of mathematics enriches her courses. Brahmadeo Dewprashad tells of an innovative writing assignment that helped his chemistry students see the connection between organic chemistry and their lives. Janice Walters describes how she finds situations her students are familiar with to lead them to concepts in psychology. Nkechi Agwu utilizes both technology and writing to create a model technology-in-teaching statistics course.

In another group of articles, instructors involved in the Visible Knowledge Project and Distance Learning write about their research on both the teaching and learning that occurs in their courses taught with technology. Joe Ugoretz looks at student learning by analyzing threads in written-down discussions on the *Blackboard* Discussion Board. Lisa Rose uses technology to aid reflection and examination of her on-line teaching and assignments. Rafael Corbalán describes his technology enhanced Spanish course, making it an enriched language course. Suzanne Schick describes her VKP project to look at how students responded to a lecture versus student-directed inquiry classroom.

Cynthia Karasek and Paquita Suárez-Coalla describe two separate out-of-the classroom projects. Both demonstrate the power of courses taught outside the box, one a project to create a video of the impact of 9/11 on Chinatown and the other through travel abroad. Maria de Vasconcelos and Dolores DeLuise tell how reflection on their process of collaboration led them to develop a similar process for their students to edit their writing. Dolores DeLuise shares a first day activity that, she finds, sets the tone for the semester. And Kenneth Foster describes his journey from student to faculty member.

These articles show the vitality of the educational enterprise at BMCC. The kind of teaching they represent builds a future and gives (back) energy. We are restored.

Both of us are stepping down as editors of Inquirer. New editors will be announced, and if you are interested, please give your name to one of us. We have enjoyed our tenure very much. It has brought us in touch with great writers, teachers, and ideas. We wish the next editors the same rewards and satisfaction.

The Editors
Rachel Theilheimer and *Gay Brookes*

Making Organic Chemistry More Concrete

Brahmadeo Dewprashad
Science Department

Organic Chemistry is a difficult subject. It requires a lot of memorization; and in any case, who needs to know this stuff?

What do the structure and reactions of organic compounds have to do with anything?

These comments are heard all too often, not only from our students, but also from students in most introductory organic chemistry courses. What are they saying? That organic chemistry is difficult, too difficult to apply to everyday life. In the face of the challenge it poses, students dismiss it as irrelevant. Making organic chemistry relevant is the challenge.

Organic chemistry is the study of compounds containing the element carbon. Millions of compounds contain carbon, while compounds containing the nearly 100 other elements number only in the thousands. A myriad of possible carbon compounds exists because every carbon atom can bond repeatedly with itself or with other elements in four different directions, leading to structures with an endless variety of shapes and thus properties and functions. Nature has used carbon from carbon dioxide to build an array of organic compounds ranging from glucose to griseofulvin, an antifungal agent. Carbon compounds are unique in that their applications touch every aspect of our lives. Our body and all the hormones that regulate its function are organic compounds. The reason we feel joy, pain, or excitement is because our body, in response to certain stimuli, produces organic compounds of the right shape, size, and charge to fit particular receptors. These feelings are transient because these chemicals do not bond chemically with the receptors but are, in time, displaced. These emotions can be modified with medications because organic compounds can be built that have similar shape, size, and charge and can occupy these same receptors. These compounds can be tailored to give desired effects. For example, compounds similar in shape and size to adrenaline have been designed and are used in medications to either slow down or increase the heart rate. Organic chemistry, in reality, is the story of life at a molecular level. So why is there such a disconnect between this reality and a student's perception of it?

Most undergraduate organic chemistry textbooks focus on the fundamental concepts and only mention some of the many applications without showing how the concepts and information presented are directly related to the students' lives. This is akin to learning a new language by learning vocabulary and grammar to the exclusion to conversation and writing. One does not have to have a full vocabulary and perfect grammar to communicate and experience the joy of a new language. Similarly, there is no reason why a beginning organic chemistry student should not be exposed to the applications such that they can experience and understand the true language of organic chemistry.

I believe that educators who let students experience applications from the beginning will facilitate a love for and an understanding of organic chemistry in a larger pool of students. Education literature shows that students become more interested, enthusiastic, learn more, and retain the fundamental concepts if the material is presented in a concrete fashion. Lessons in which students solve real-life problems are even more effective.

I am attempting to make the introductory organic chemistry course I teach more concrete without sacrificing content. I address concepts as the textbook presents them. However, lessons incorporate problems based on applications of the principles in the text. I design these assignments such that students are exposed to technology that presents information in an interactive and multisensory fashion. I post assignments on the course website and provide links to the references. The assignments require that students be able to assimilate concepts, form opinions, and present these coherently in writing—often to solve a problem.

I have found the preparation and grading of such exercises, though labor intensive, to be

satisfying. The chemistry in the examples I use is very advanced, and I must find ways to present it both correctly and simply enough for students to understand without too much background. Despite the difficulties inherent in the assignment development process, the students' responses to the assignments make the work I put in worthwhile. I see how involved the students become in their work. The class becomes livelier. In contrast to homework problems from the textbook that do not include applications, through the problems I construct for them, the students begin to see chemistry as more than something to memorize just long enough to take an exam.

Students have indicated that these assignments help them gain a better understanding of the course material. I have not yet developed such exercises for all the major topics. However, I am encouraged by the effectiveness of the exercises and am continuing to develop similar exercises for additional topics. In addition, I have noticed that test scores (from standardized organic chemistry exams) have improved in topics for which I have constructed real-life problems for students to solve. In time, I plan to quantify these differences.

Below is an example of such an assignment I have used to make stereochemistry, the study of the 3-D structure of compounds, more concrete. Normally, many students find stereochemistry difficult to grasp as it requires the ability to visualize molecules in three dimensions. Mastery of it requires intensive practice. Usually only motivated students are willing to put in the time necessary to master it. The assignment follows:

> Provide an appropriate response (in no more than 300 words) to the following letter.
>
> Dear Student,
> I would be grateful if you would be kind enough to help me understand some information that I have read about a medication that I am taking.
>
> I suffer from chronic oversecretion of acid by the stomach. For years, I have been taking Prilosec® (omeprazole). My doctor has switched me to Nexium™ (esomeprazole). He has indicated that it is manufactured by the same company and that it has improved chemistry. I have read that both medications have the same chemical compound as their active ingredient. How can that be and yet one is supposed to be better than the other? I have come across the words "enantiomers," "R," and "S" used to describe the differences but these words only confused me more. I have also read that the effect might be different in different races. Why is this so?
>
> Confused
>
> Before you reply, it is suggested that you answer (for yourself) the following questions:
> (1) How are the (3-D) structures of the active ingredients of Prilosec and Nexium different?
> (2) How are the (3-D) structures of the active ingredients of Prilosec and Nexium similar?
> (3) What effect does the difference in structure have on the mechanism of action of these medications?
> (4) What effect does the difference in structure have on the metabolism of these medications?
> (5) Is/are there any advantage(s) to taking Nexium over Prilosec? If so, what is/are the advantage(s)?
> (6) How is Nexium metabolized in different races?
>
> Use the information to provide a coherent reply. Please submit a draft reply before writing the final reply.
>
> Reference:
> *http://www.nexium-usinfo.com/moa/moa.asp*

I find this assignment generates a lot of questions. Students email me. They ask questions in class. They come by my office. They ask the kinds of questions that a textbook chapter might evoke, but they also ask questions related to their personal experiences. They tell me about a relative of theirs who is taking a medication and raise specific questions from that experience. They want to know why they cannot take an inexpensive over-the-counter antacid instead of Nexium™, which leads me to say, "Okay, let's look at the chemistry of antacids and compare them." The antacid neutralizes acid that is produced by the stomach, whereas Nexium™ was designed with a specific charge and shape so that it fits into certain receptors that control the secretion of acid.

Instead of glossing over the concepts, the students are the ones who press to go into greater depth. To do this, they need to use material they learned earlier in general chemistry but may have forgotten. This gives me the opportunity to go back over fundamental concepts about which normally they might not want to hear. I have the chance to tie together all the chemistry they have been taught before but not necessarily learned.

Now I find myself developing more and more application exercises because I see how well they work. I feel satisfied when students tell me that they didn't realize chemistry could be so interesting.

Note:

The Website referenced in the assignment is linked to the course website. The website is that of the AstraZeneca, the pharmaceutical company that developed Nexium™. It describes in text and with streaming videos how Nexium™ works. In very simple language and with 3-D animations, it explains stereochemistry and its application to the mode of action of Nexium™. In order to appreciate the difference this exercise makes, I suggest you log on to the website. I guarantee you will enjoy your tour and will end up with a fundamental understanding of stereochemistry and an appreciation of the role of organic chemistry in your life.

Suggested Answer

Dear Confused,

> Both Prilosec® and Nexium™ reduce the amount of acid that the stomach produces. Prilosec® contains two chemical compounds, which are mirror images of each other. Objects that are mirror images are identical in every way except the direction they face. Our left and right hands are examples of objects that are mirror images of each other.
>
> Compounds that are mirror images of each other (such as those in Prilosec®) are called "enantiomers." In order to distinguish them, one is called "R" and another "S." Prilosec® has both the R and S while Nexium has only the S. The S enantiomer acts longer in the body (as it is broken down slower). As such, one would expect that for equal doses of Prilosec® and Nexium, more of the medication in Nexium™ (than in Prilosec®) remains and works at reducing acid secretion.
>
> About 15-20% of Asians have a genetic predisposition that prevents them from breaking down the R isomer of Prilosec® as rapidly as the rest of the population does. In this group, more of the chemical compounds of Prilosec® would remain and act in the body. Nexium™, which does not have the R isomer, should not have a different activity in this group of Asians than in the rest of the population.

Sincerely,
Student

Incorporating Student Research Projects on the History of Mathematics into Mathematics Teaching

Annie Yi Han
Mathematics

The history of mathematics introduces students to a critical and cultural study of mathematics and can, therefore, play an important role in mathematics education. I find doing research projects that include the history of mathematics benefits both the mathematics and non-mathematics majors in the discrete mathematics course I teach. Mathematics educators at various levels have suggested that the history of mathematics is a marvelous resource for motivating and exciting students of mathematics (Man-Keung, 2000). The history of mathematics provides students with information about the development of mathematical knowledge and procedures and affords them insights into those cultures and times. It gives students hints of the forces that shaped and influenced mathematical concerns (Swetz, 2000). Students can learn to appreciate and better understand mathematics when they study the history of mathematical ideas along with the ideas themselves.

The discrete mathematics course, MAT 200, is either a mathematics requirement or an elective course for a number of programs in BMCC. It is the only discrete mathematics course offered at BMCC. Three-quarters of the students in this class are Computer Science, Mathematics, and Science majors. The others range from Business to Liberal Arts majors. Discrete Math 200 is a four-credit course that typically meets twice per week. During the semester it covers number theory, logic, sequences, set theory, counting, probability, relations, and recursion. The students learn about theoretical mathematical proofs throughout the course.

I hope the students' research projects will develop a community of learners empowered in the art of reflective practice and in the use of history of mathematics research projects within a learner-centered class setting (Cohen, 1995). Exposure to innovative research activities within the course is a powerful learning experience for students. My specific purposes for their projects are:

- To use the history of mathematics to motivate students who are studying discrete mathematics;
- To enable students to gain knowledge of the development of mathematical knowledge and understanding; and
- To provoke insights into the culture and times of specific mathematical discoveries and to give hints of the forces that shaped and influenced mathematical concerns.

At the beginning of the semester I distribute *Research Project Guidelines* along with the course syllabus in class. Here is a sample from the guideline:

> Based on the topics that you have learned in class, choose either a *theorem* or a *mathematician* as your research topic.
>
> If you choose a *mathematician*, such as Fibonacci, you should describe this mathematician's major mathematical contributions, describe one of his or her discoveries in detail; find the original source where Fibonacci, for example, presented his puzzle about modeling rabbit population growth (Enzensberger, 1998), discuss this problem and other problems posed by Fibonacci, and give some information about Fibonacci himself; explain how the Fibonacci numbers arise in a variety of applications, such as the study of arrangement of leaves in plants, in the study of reflections by mirrors, and so on.
>
> If you chose a *theorem*, e.g. the "Chinese Remainder Theorem," you should describe the

history of the Chinese Remainder Theorem; describe some of the relevant problems posed in Chinese and Hindu writings, and show how the Chinese Remainder Theorem applies to them.

Traditionally I start the MAT 200 class with the story of a mathematician. At the beginning of each chapter, I give students a historical overview so that students will get snippets of the history of mathematics and brief stories of mathematicians. By including the history of mathematics, I hope to motivate students, afford perspective, and present a fuller and more complete picture of mathematics.

Students choose their history of mathematics research project topic in the first five weeks of the semester. The research topics are limited to the history of mathematics within the discrete mathematics field. The projects can be done individually or in groups. During the semester, students use a variety of reference sources (i.e. books, articles, and the Internet) to study the history of mathematics, and they discuss their findings with their classmates and me.

During the semester, I meet with each student individually or as a group at least two times to discuss his/her project. At the first meeting, students submit their project topic and bibliography. I discuss these with them and make sure they have enough materials and information to carry on the project. Before the final draft is due, students usually submit a first draft to me for suggestions. At the end of the semester some students present the project. All presentations are done on a volunteer basis.

Incorporating the history of mathematics research projects into a discrete mathematics classroom does not necessarily make all students obtain higher grades in this class. It does make learning discrete mathematics a meaningful and lively experience for my students and me. Student research projects have ranged from learning about the lives of mathematicians to a historical investigation of mathematics theory. They discover that the Greek philosopher Aristotle (not a mathematician) wrote the first great treatise on logic. They are surprised to know that the famous mathematician De Morgan was handicapped as an infant.

All in all, I find that incorporating the mathematics history research project into the discrete mathematics course:

- *Helps students develop mathematical literacy.* Research projects enable students to obtain a deeper understanding of mathematics concepts. Students see that mathematics is not just a batch of formulas with symbolic notations.
- *Develops students' ability to communicate their knowledge of mathematics when they present their projects in class.* The research project forces students to communicate mathematically. They have to explain what they learn from their research project to their classmates in writing or an oral setting. They have to use a common language to explain their findings so that everyone can understand.
- *Has a positive effect on the students' participation as well as their confidence in speaking about mathematics or a mathematician.* The research project gives all students a chance to learn something they are interested or are passionate about. Students who do not feel confident enough to go to the board to do a mathematics proof early in the course will do so later to present what they learned about a mathematician's proof of more than 100 years ago.
- *Makes the classroom a more relaxed and enjoyable working place for me.* When I teach a topic on which I know a student is doing a project, I ask them to talk about what they have found out about this topic or this mathematician. Usually, class discussions are very lively, passionate, and enjoyable. The students are eager to discuss their mathematicians or their findings. They even argue over which mathematician truly first discovered a mathematics theory.
- *Makes learning discrete mathematics a meaningful and lively experience for the students and the instructor.* Certainly, it is a great teaching and learning experience for me. I very much enjoy working with students and teaching the class (even though there is much more work in it than in any

of my traditional math classes). Student comments within and about their research projects show that they felt it was a worthy project. I believe that including the research project in my discrete mathematics is a worthwhile experience for both my students and me.

The following are some quotes from the students:

> I learned the Fibonacci Numbers in high school, never understood and hated it too, because I just couldn't memorize it. After my research project on 'Fibonacci and Fibonacci Numbers', I see Fibonacci Numbers everywhere. I really enjoy explaining to people what a Fibonacci Number is. My family and friends call me "The Fibonacci Fan" now.

> I come from Bangladesh, so naturally I have always been interested in Islamic history.... There are [currently circulating] a lot of true and false stories about math & science history in the world.... I want to find out more about the Muslim Mathematicians.

I concur with the historian of science, George Sarton (1957), when he says, "The study of history of mathematics will not make better mathematicians but gentler ones; it will enrich their minds, mellow their hearts, and bring out their finer qualities" (p 28).

References:

Cohen, M. (Ed.). (1995). Crossroads in mathematics: Standards for introductory college mathematics before calculus. Memphis, TN: American Mathematical Association of Two-Year Colleges.

Enzensberger, H. M. (1998). *The Number Devil.* New York: Metropolitan Book.

Man-Keung, S. (2000). The ABCD of using history of mathematics in the (Undergraduate) Classroom. In V. Katz (Ed.), *Using History to Teach Mathematics* (pp. 3-9). Washington, DC: The Mathematics Association of America.

Sarton, G. (1936/1957). The study of the history of mathematics and study of the history of science. (Reprinted, Ed). New York: Dover.

Swetz, F. (2000). Mathematical pedagogy: An historical perspective. In V. Katz (Ed.), *Using history to teach mathematics* (pp. 37-47). Washington, DC: The Mathematics Association of America.

First Things First

Dolores DeLuise
English

When I first began to teach, it seemed to me that first days were lost days, but I have since changed my mind. I have observed since then that the first day of any class is usually a paradigm for the entire semester. I have tried, therefore, not to surrender myself to the chaos that threatens, but to make some order out of it and use the energy that ensues to my and my students' advantage. I selected a small piece of information, but one that lies at the center of my subject: the uses of the comma. One way of mastering the sentence (an important goal in a writing class) is to master the comma. I take this opportunity to introduce them to this small but essential curve.

After discussing the course requirements, rules, and regulations, we place our chairs in a circle and we go around the room introducing ourselves—names, majors, interests, and "anything special" the rest of us ought to know, and then I turn to the lesson on the comma. I explain how to use commas to set off parenthetical elements in sentences. We do a few exercises in which students generate some sentences with parenthetical elements that they set off by commas. Hearing their own work and the work of others aloud reinforces what they've learned and serves as a model they can use if they didn't get it the first time around.

What I try to communicate without saying so on the first day are the basic principles I rely on the entire semester: We will be governed overall by traditional authority (we have rules and regulations); we should be receptive, nevertheless, to egalitarian ideas (we sit in a circle and tell important information about ourselves); we're here to work (we participate in a grammar lesson); it is my hope that you will continue to pay attention and be successful (all read perfectly correct sentences, learn from each other, receive praise, and feel very good about it).

This technique may be adapted to almost any discipline: a brief focus on a small but important element in order to shine a spotlight on the course work that lies ahead.

Utilizing the Richness and Diversity within the Classroom

Janice Walters
Social Science

When I began teaching at BMCC, I was very excited about the opportunity to teach students whose backgrounds are culturally diverse. BMCC students bring varied life experiences into the classroom. Originally from Australia, I come to BMCC with a different cultural background and with the experience of having been a non-traditional student myself, the mother of four children, when I returned to college. For the most part the students in our classrooms are adult learners, as I was, who bring a lot of prior knowledge about life that I believe can be utilized in the teaching process.

Learner-centered Teaching

The literature on teaching and learning suggests that when information is presented to the learner in meaningful ways, it is processed at a deeper level, and this results in greater comprehension and retention of information (Bransford, Brown, & Cocking, 1999). Students often believe that, to the contrary, they have to learn a list of facts to do well on tests, and sometimes this is true. That strategy can fail them, however, when a professor or situation requires them to understand and apply these facts.

Using memory as an example, students can memorize the fact that short-term memory is limited because it only holds an average of 7 pieces of information, but this has little meaning until they think about the times they have tried to memorize many items included in a list of information and realize how often this strategy has failed them on a test. Now the limits of short-term memory have personal meaning. When I tell them they can increase their memory capacity by chunking information under categories, they are likely to understand why they need to do this and to apply this strategy in the future. My guess is that they will also remember the fact that short-term memory is limited.

The education literature has also questioned whether instructional strategies should be different when learners are adults who bring life experience to the classroom. Professional schools, for example medical schools, have moved in the direction of using clinical cases to provide a learning context in which adult learners take responsibility for their own learning (Barrows & Tamblyn, 1980). Using cases, students identify important learning issues, find relevant scientific explanations for patients' symptoms, and engage in critical thinking and problem solving. In other words, students are expected to think, identify key issues, integrate information, and solve problems. This type of learning environment is described as "learner centered," and it encompasses teaching practices that are "culturally responsive" (Ladson-Billings, 1995). It has also been described as "diagnostic teaching" (Bell, O'Brien, & Shih, 1980). Bell (1982) describes this environment as one in which teachers attempt to discover what students think in relation to the problems at hand. This knowledge allows the teacher to identify and discuss students' misconceptions sensitively. The teacher can then provide students with situations that they can think about and that will enable them to readjust their ideas instead of learning based on misconceptions. The readjustment of ideas, I believe, is particularly relevant in the domain of psychology, because we all bring many misconceptions to our understanding of human relationships and behavior, much of which is not compatible with theoretical explanations.

Vygotsky (1978) also spoke about the importance of active learning. He argued that the social environment, which includes tools and cultural objects as well as people as agents for developing thinking, is critical to students' learning. In his model, the role of the instructor is to provide

students with knowledge and skills within a supportive environment to help students move through the Zone of Proximal Development (ZPD)—that range of difficult matter that one can master only with support—toward ultimate mastery of knowledge.

The alternative to such a "learner centered" approach is the "teacher centered" approach. This approach is based on the assumption that students are empty vessels. Teachers provide them with as many facts as time permits while students passively memorize this information. I know that I have been a "teacher centered" instructor at times during my years of teaching, but the years I spent working as a facilitator for case-based learning at a medical school influenced me greatly. There I watched the excitement and enthusiasm active learning generated among the students as they struggled to master information within a supportive learning environment. I also know that, as a student, I was most excited and learned the most when I was actively involved in my own learning. Therefore, I set out to implement active learning in my classroom at BMCC.

Yet I believe, too, that students must learn the theories of psychology well if they are to utilize them fluidly when explaining human behavior, and for many students these theories are very new. My challenge is to move back and forth between teacher-centered and learner-centered approaches. For the students to acquire basic information about psychological theory and research I must provide them with this information, together with a learning environment in which they are able to find relevance for this information so that they can apply it flexibly to the study of human behavior.

After all, psychology offers a very important theoretical and research basis for explaining the human relationships and behavior in daily life. For example, attachment theory and research speak about different types of attachment that develop in infants as a result of parental sensitivity and responsiveness. When students observe an infant's behavior when the child is in close proximity to the mother, the students can make inferences about the early developmental experience of the infant and predict the attachment style from which this infant may operate in future relationships.

My teaching approach is to determine the knowledge that students bring to the classroom and to utilize this knowledge to encourage them to think about the questions and information I present them with. For instance, when teaching about operant conditioning, I ask the students if they have observed or experienced a situation in which a child has a tantrum in a store to get a toy. Most students have. From this point of reference, I can teach them how powerful reinforcement (buying the toy) is in encouraging undesirable behavior (the tantrum), although the adult does not intend to reinforce that behavior or want the tantrum to become a habit.

The Challenge of Time

The challenge with this approach is the time needed to get to the end point. It is much easier to give students the answer up front, but the outcomes are quite different. Given that our students have so much life experience, they offer plenty of material to work with even if they hold misconceptions that come with their knowledge. Again, drawing on the concept of reinforcement, when students hear the word "negative" in negative reinforcement they associate it with punishment and believe it decreases the frequency of behavior. It takes time to provide them with enough examples of the ways in which negative reinforcement increases instances of behavior to change their misconception.

I expect students to participate, to struggle with finding the answers to questions I raise, and to be able to explain how theory and research findings are relevant to their explanations. I also believe that providing a safe environment is critical to the success of this approach since students often have difficulty taking the risks involved in active learning. Creating a safe environment also requires time.

Time becomes an issue again with a long-range project in abnormal and developmental psychology classes. In both of these courses, students complete a written project in addition to

examinations. In this written project, they critically evaluate and apply knowledge based on theory.

In the abnormal psychology class they begin by reading an autobiography or biography of a person who has suffered from mental illness. A popular book last semester was *A Beautiful Mind*. After they read the book they have selected, students write a case report based on the situation presented in the book. The most important part of their case report is the psychological evaluation section. In this section, they explain the symptoms and behaviors of the person using theoretical concepts and principles. I encourage them to focus on early developmental relationships and theory to explain the person's symptoms and ways in which theory can be used to address the causes underlying the symptoms.

Students' initial reactions to this project are "I can't do this;" "I don't know enough;" and "How can I be expected to understand and explain the symptoms and behaviors of a person with mental illness, especially using theory?" Their second and third reactions are often the same. However, after several drafts and their ensuing increased knowledge, and with support and feedback, they complete the final paper and hand it to me with great pride, saying that the task was not as daunting as they initially thought it would be.

Students' intellectual debates about how a case might be interpreted based on the different theories we cover in the course delight me. Unfortunately, this does not always happen until we are saying goodbye for the semester. How might I speed up this process? Is it possible for students to grasp theories thoroughly earlier in the term? Each semester the learning process seems to unfold over the course of the term.

The Results of Active Learning

When BMCC students work in a learning environment with high expectations, encouragement, and support, they can become active learners. They can leave the classroom able to use the course information in meaningful ways. They become ready to address such questions as "What do theory and research tell us about the long-term outcomes of social and cognitive development based on the use of different types of discipline and parenting styles?" and "How might we understand and explain the behavior that is so difficult to manage when an elderly person is suffering from Alzheimer's disease?"

My hope is that the students have taken a first step in building a solid foundation both in psychology and for life-long learning. Moreover, when students become active learners in the classroom, it is as much a learning experience for me as I believe it is for them. I am fortunate in becoming a student in my own classroom and learning from the richness of the students.

References

Barrows, H.D. & Tamblyn, R.M. (1980). *Problem-based learning: An approach to medical education* (Vol.1). New York: Springer.

Bell, A.W., O'Brien, D. & Shiu, C. (1980). Designing teaching in the light of research on understanding. In R. Karplus (Ed.), *Proceedings of the Fourth International Conference for the Psychology of Mathematics Education*, ERIC Document Reproduction Service No. ED250 186. Berkeley, CA: The International Group for the Psychology of Mathematics.

Bell, A.W. (1982). Diagnosing students' misconceptions. *The Australian Mathematics Teacher 1*, 6-10.

Bransford, J. D., Brown, A. L., Cocking, R. R. (1999). *How people learn: Brain, mind, experience, and school.* Washington, DC: National Academy Press.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal 32*, 465-491.

Vygotsky, L.S. (1978). *Mind and society: The development of the higher psychological processes.* Cambridge, MA: Harvard University Press.

Student, Fellow, Faculty: My BMCC Odyssey

Kenneth Foster
Social Science

My BMCC odyssey began in the fall semester of 1976. I thought I wanted to be an engineer, and I enrolled at New York City Community College, later called New York City Technical College and now named New York City College of Technology. I took drafting, learned how to read blueprints, went to work in the construction industry, and put school on hold. I found my way back to CUNY in the mid-80s and landed at BMCC. I got my AA degree in 1989 and moved on to Brooklyn College. A professor from NYCCT introduced me to the CUNY BA/BS program, and that was when I got some grounding and structure and began to focus on what I wanted to be when I grew up. A few years earlier I had been introduced to and was drawn in by the world of behavioral and psychological research. I had landed a good job and liked the work, but a voice in my head kept telling me to finish my B.A., go to graduate school, get a Ph.D., and go out and do some much-needed research.

In the spring of 1994, I was about to graduate with my B.A., and things were looking good. However, one night in April changed my life. I was struck by a car and nearly killed. I spent eight months recuperating; and when I got ready to return to school and work, I was told I had been fired from my job. That shock sent a thousand thoughts through my head. And there was that voice again: "Go to graduate school, get a Ph.D., and go out and do some much-needed research." I plunged into the process and applied to, where else, CUNY. I had to take two GRE exams on the same day, but that was the price of the ticket if I were to be accepted for the coming fall semester. The gods were with me, and I simultaneously graduated from CUNY BA and was admitted to the social/personality psychology program at CUNY's Graduate Center.

In the fall of 2000, I applied for what sounded like a wonderful opportunity to teach at BMCC. The BMCC Minority Fellowship is an innovative program designed to encourage qualified minority scholars to pursue careers in teaching at the community college level. I filled out the paperwork, secured the reference letters, and waited to see what, if anything, would evolve. A few months later, I was sitting across a table from Senior Vice President Sadie Bragg, being advised that I was nominated for the one-year Fellowship. A few weeks later, I received a letter from President Perez, stating that I was in fact selected as the 2001–2002 BMCC Minority Fellow. The information literature outlined how I would teach two classes per semester and participate in a variety of faculty activities to give me the exposure and experience of what it is like to be a full-time professor. I became excited at the prospect of BMCC as "a place to land." Having graduated from BMCC a decade before, I was intrigued by the idea of coming full circle.

One of my first meetings was with Ron Doviak, the chair of Social Science, the department to which I would be assigned. Our discussion was comfortable, and it was then that I got my first glimpse of what it might be like to be part of an interdisciplinary group of scholars and educators.

Streams of memories came flooding back as I walked the halls, memories of when I walked those same halls as a student. I saw familiar faces, like Professor Hugh Dawes, with whom I took economics (and will not share with you my grade in his class); Professor Doris Hart, who taught me about critical thinking and later was gracious enough to mentor me while I was in the CUNY BA program; and Professor James Blake, a man no less spirited today than he was over a decade ago. It all seemed a bit strange at first, this new relationship with these people. Nonetheless, with their help and the help of others, I began to feel like a colleague.

Having taught as an adjunct since 1998, I was only peripherally exposed to the broad

array of responsibilities and opportunities germane to being a full-time faculty member. Thus, I entered my first departmental faculty meeting with some fear of the unknown. In what seemed like an instant, however, Professor Ron Doviak, Professor Emily Anderson, and others welcomed me and made me feel at home. Ever since then, members of the Social Science faculty and staff checked in with me, almost daily, asking how I was getting along, showing interest in my dissertation research, and offering to help in any way they could. One of the advantages of the Fellowship is that the Fellow is provided with a mentor. Professor Anderson volunteered to take on this role and work with me. Professor Anderson has been invaluable in this process and, from the start, has helped me with situations big and small. She encouraged me to join a committee and attend meetings such as the discussions with President Perez and the small groups with Senior Vice President Bragg; she volunteered to read drafts of my dissertation and introduced me to faculty and staff in and out of our department. With her encouragement I presented my ongoing dissertation research under the auspices of the Teaching Learning Center. The sizable group of students, staff, faculty, and administration attending my presentation showed real and refreshing interest and offered me a constructive critique.

During my time as a Fellow I also took advantage of some of the faculty development opportunities that were available. I took a workshop in *PowerPoint*, a tool that I use in all of my classes, and I received training in *Blackboard*, the online teaching platform. Faculty council meetings were my introduction to yet another level of the faculty's involvement in the operation of our school. Watching any number of ideas, opinions, and suggestions become motions to be carried or not, under the discipline of Robert's Rules, was fascinating. To think that I might someday actively participate in this process was exciting.

It goes without saying that the chain of events beginning on the morning of September 11, 2001, changed the course of my Fellowship, as it changed the course of our nation and our world. It was a phenomenon for which no reasonable immediate contingency or response could be expected. For a long time, maybe forever, I will vividly recall the night of September 10. I had finished teaching my class in Fiterman Hall and waited on Church St. for the commuter bus to South Jersey. I looked down Church St. and marveled at the twin structures, basking in a good feeling about my new position and my prospects for a prolonged future at BMCC. I remain astounded at the resilience demonstrated by our students during that dark, somber period both before and after classes resumed. One of the several students of mine that contacted me, when we could not meet for class, told me in graphic terms how she was on a fifth floor computer when time froze and her "heart was shaking."

Life at BMCC continued, however. There were the social and cultural events. I attended the Kwanzaa celebration, film screenings, a student's freestyle rap competition, the PSC/CUNY holiday luncheon, and a Student Government session, and I found myself feeling like an integral part of the community. Having completed the first half of the Fellowship, I became even more certain about my desire to pursue a full-time position.

In the spring semester I saw a fairly large number of students streaming into the adjunct office, looking for guidance, asking questions, wanting to do better. It is my hope that each of them, even those to whom I told something they did not want to hear, left with a sense that I was ready, willing, and able to help them. They have offered me heartfelt gratitude and provided me with a sense of satisfaction. Some have sent me e-mail to voice their thanks. On more than one occasion students have asked me to submit letters of recommendation—each of these students was deserving of such a letter—and among the results, one student, a sixteen-year-old taking AP courses, has been accepted into a summer program at Stanford.

It has been an honor to be the 2001–2002 Borough of Manhattan Community College Minority Fellow. Likewise, it has been an exceptional experience. I have learned a lot since August

2001, most of which has helped make me a better person and educator. The year culminated in a request that I continue service in a substitute capacity for the 2002–2003 school year. I was happy and humbled. And just to bring the story of my BMCC/CUNY odyssey current, I recently received another letter from the President. This one was to inform me that I had been approved for a tenure-track position. So I have gone from student to faculty, a trek that I reflect on with pride and satisfaction. At the beginning of each semester I make it a point to let students know that such a trek is within their reach. BMCC gave me my first college diploma and a whole lot more.

I cannot overemphasize the helpfulness of faculty and staff. Most have offered their time and expertise as a source of networking and professional development. The collegial atmosphere is one that I hope to continue enjoying and have as a source of growth.

To date, the opportunities afforded me through the BMCC Minority Fellowship have been significant, informative, and often enjoyable. While I have yet to explore the full extent of the available opportunities for faculty development, I believe I have made some important strides in this new position.

Note:

I would be remiss if I did not thank and acknowledge Professor Rachel Theilheimer for affording me the privilege and honor of contributing to this journal.

Using Writing in an Introductory Statistics Course

Klement Teixeira
Math
Karen Steinmayer
Writing Fellow

In the fall semester of 2002, we, Klement Teixeira of the Math Department and Karen Steinmayer, a Writing Fellow, introduced Writing Across the Curriculum (WAC) into an introductory class in Statistics. This was the first time Klement had worked with a writing fellow to develop a writing intensive course. He hoped students in it would acquire knowledge of statistical concepts and procedures to apply to situations in everyday life.

Klement selected a section taught with computers where the curriculum focused on concepts rather than rote memorization of formulas and facts. Klement thought that writing in a concept-oriented class would help students more fully grasp the fundamental ideas in statistics. In addition, students taking this course create a survey and analyze the resulting data. He thought a written report on this data analysis, discussing the objectives of the study, the methodology, the results and conclusions, would help students improve their writing skills, which are essential in virtually every field.

We met once a week for at least an hour. During these meetings we found many additional ways to incorporate writing into the statistics course. Klement commented that statistics seems to lend itself to writing. To begin with, a number of the textbook's homework assignments elicited brief written discussions of situations in which certain statistical procedures were appropriate or required written explanations of how results could be interpreted. We used several such homework problems to introduce writing into the class and to accustom students to explaining their ideas in writing. In addition, Klement looked at and sometimes graded what WAC calls "medium-stakes" writing, but these carried relatively little weight in students' final grades. We also chose homework problems that dealt with applying key statistical concepts to situations in daily life to help address Klement's goal that the students taking this course be able to apply knowledge of statistical concepts and procedures to everyday life situations.

The Introductory Assignment

We next created a small "high-stakes" assignment designed to lead up to a larger "high-stakes" project for the semester. A "high-stakes" assignment in WAC terms is one that's graded and contributes significantly to the overall evaluation of the student's work in the course. For this smaller "high-stakes" assignment, we asked students to create a flow chart describing the three main measures of center. They also wrote at least three paragraphs about these three measures, including a definition of each and descriptions of situations in which it is advantageous and disadvantageous to use each. This assignment is presented below:

> MAT 150- Written Assignment on Measures of Central Tendency
> The measures of center have different advantages and disadvantages. These are summarized on page 61 in the course text. Please begin by constructing a flow chart illustrating in which situations each of these measures should be used.
>
> In approximately one to two pages of written text, please explain your chart. *Include* definitions of each of the three major measures of central tendency. Explain in which situations each measure should be used and not used. Use examples in your explanations. Your paper should be a minimum of three paragraphs long. Be sure to include an introduction, a main body and a conclusion.

Major Goals of the Introductory Assignment

We designed this assignment to give students experience in 1) using the discourse appropriate to good statistical writing, 2) creating visual representations, such as diagrams, charts, and graphs, which are important means of representation and communication in statistics, and 3) translating between the two forms, written prose and graphic representation. The last is an important skill in daily life and on tests, but which students rarely rehearse in course work.

Results of the Introductory Assignment

We were delighted that many of the students produced excellent, imaginative diagrams and charts to illustrate the three measures of center and situations in which they are most appropriately used. Reading these first papers, Karen also identified three areas of concern.

The first related to the students' developing grasp of essential aspects of statistics. Some of the language students used to discuss statistical concepts seemed better suited to arithmetic than to statistics. For example, several students stated that the inappropriate use of a measure of central tendency "wouldn't give you the right answer" or that "you would get the wrong answer." Klement agreed that this phrasing was problematic. In the discourse of statistics one would say that inappropriate use of a measure of central tendency "would not represent the data fairly" or "would not best serve to represent or describe the data." Not merely matters of different phrasing, these statements represent important differences in thinking. This recalls "writing to learn" in WAC, the use of writing to help students develop their thinking in a discipline with its discourse.

The other two concerns related to developing general skills in writing, or in WAC terms "learning to write." Our second concern was that several students made lists instead of expressing their ideas in continuous prose. When students use lists or abbreviated writing, they may find it difficult to explain ideas adequately when called on to use continuous prose. Moreover when students used abbreviated writing, we did not know whether they understood an idea but had trouble verbalizing it, or whether they really did not grasp the basic concepts involved.

Our third concern was that several students did not seem to understand how to structure their papers. They had difficulty with paragraph structure and didn't seem sure what to include in the introduction, the body of the paper, and the conclusion. To address these concerns, we both gave students extensive written and verbal feedback on this introductory assignment.

Designing the Major Assignment for the Semester

During our third or fourth meeting of the semester, Klement pointed out that one of the main ways writing is used in statistics is in constructing questionnaires for survey research. Karen realized that writing could help students learn to distinguish between an overall research question answered by gathering data and the individual questions actually asked of participants. Writing could also help the students learn that questions with differing answer formats must be stated in different ways. For example, questions designed for yes/no answers must be phrased differently from those designed for scaled responses, where respondents select from a range of possible answers, from strongly agree to moderately agree to strongly disagree. For the major project, we decided to have the students use writing to formulate a research question, design a survey to collect data to address this question, and write a final report to explain the results.

Developing the Research Question

Students used informal, "low-stakes" writing to construct the central research question, or topic, for the survey study. A " low-stakes" assignment in Writing Across the Curriculum terms is one that is not evaluated by the professor. In some circumstances, the professor may not even read low-stakes writing. The students worked in groups in class and also did some individual "low-stakes" writing at home to construct research questions. Each group designed one to three research questions. The class then voted to decide which group's question would be used. The class decided

to investigate the question of what percentage of BMCC students are employed and what their motivation for employment is. Students then did more low-stakes writing at home to finetune the wording of the research question.

Creating and Conducting the Survey

The students created a survey questionnaire on this research question. They used informal, low-stakes writing to construct the individual questions to be used, writing in groups in class. In addition, students did more informal writing at home to revise the questions suggested in class. In class they discussed how to word questions effectively, including how to format questions to match the formatting of the answers, the difference between questions to elicit yes/no answers and those for scaled responses, which question format tended to provide richer data, when to use the various forms of questions, and which questions can be asked of respondents and which must be answered by researchers from the data.

Each student completed the survey. In groups of three or four they analyzed the resulting data; however, each individual student computed descriptive statistics, produced accompanying graphical outputs, and wrote a report on the findings.

The Written Report on the Survey

We introduced the final, written report by discussing the uses of statistical analyses with the class. We pointed out that surveys are of little use unless the statistical data they produce are interpreted in ways that answer the research question. Then, we handed out the written instructions for the final report.

Students wrote one preliminary draft, on which they received feedback, and a final report. The goal of a statistical report is to report and interpret the results of a study to answer the research question. In the written instructions, students were told:

- First, to begin this two to four page paper by explaining their graphs, a task for which we tried to prepare them in the earlier assignment on measures of central tendency. They were to discuss why they chose that type of graph, for example, a histogram or a bar graph, and to explain the information conveyed by the graph.
- Next, to interpret the results of the frequency tables.
- Then, to report and interpret the measure(s) of center, including an explanation of why that (those) measure(s) of center seemed appropriate.
- Lastly, to report and interpret their measures of spread, new material they had studied since the earlier paper on measures of center. We were, thus, asking them to integrate new material with material covered in the earlier paper.

We also told them:

- To write this as a formal paper with complete sentences, good grammar, and proper punctuation.
- To include an introduction, a main body, and a conclusion.
- Finally, to write as a professional writing to someone who is educated but does not have an extensive background in statistics. They were to sound intelligent and professional, but avoid using overly complex language and statistical jargon.

Klement explained that information comes across most clearly when it is expressed in a straightforward manner. Good writing in statistics should be clear, precise, and succinct. He also emphasized that it was important that students use the extensive feedback Karen had given each student on their earlier assignments and that poorly written papers were unacceptable. We think these verbal instructions helped to reinforce that Karen's contributions were an integral and important part of the class.

The Rubric

With the assignment, we gave students a rubric that we designed to address two goals: first, to make clear the bases on which students' papers were being evaluated and second to facilitate our extensive feedback on both the draft and the final paper. While Klement taught this class with Karen, a Writing Fellow, we wanted to streamline the feedback process for future WAC classes taught without the help of a Writing Fellow.

Conclusions

To Klement's surprise, none of the students in this class objected to writing, perhaps, at least in part, because he told them that they would need excellent writing skills when dealing with the "real world" after graduation, not only in their professional careers but also in their future study at four year colleges. Karen thinks that the way Klement introduced writing, reinforced its importance throughout the semester, gave verbal instructions, and integrated Karen's input played an important role in the way these students dealt with writing in this mathematics class. Looking back at the semester, Klement noted that this was a lively class, very engaged in the material and "great to work with." While most of these evening students came directly from work, none of them seemed bored or exhausted.

Does a writing program in a statistics class really improve students' grasp of the material? Writing takes up time that professors feel they need to cover course content. Klement believes that it's a worthwhile trade-off because students in this course seemed to have a better grasp of the topics that they did cover. Bearing in mind that correlation is not causation, he noticed that every student in this class excelled in answering the section of the first test devoted to problems on the measures of center, the topic of the first, introductory high-stakes writing assignment.

Did the students' writing improve? Klement thought that all students but one showed improvement in writing. We both think that this improvement, from the first, smaller high-stakes writing assignment to the first draft of the second, longer high-stakes assignment, was influenced by the professor's instructions that these drafts incorporate Karen's feedback.

Even without statistical evidence to prove it, we can say that the combination of this professor, this Writing Fellow, this group of students, statistics, and WAC produced highly satisfactory results. Klement definitely would consider using writing in his statistics course in the future.

The Search for le Mot Juste: The Role of the Translator in the Writing Classroom

Dolores DeLuise
Maria de Vasconcelos
English

We believe it is no accident that the first words of Teresa Salema's award-winning Portuguese novel *Benamonte* are "I can't find the words." During our collaborative translation of this work, our search for *le mot juste*, which is needed to (re)create an ineffable mode and style of writing (presence, voice, passion), led us to a new kind of respect and tolerance for one another. We discovered that collaborative work can strengthen or just as easily destroy a friendship. We thought it would be a good idea to see if we could foster a kind of two-way communication to help our students, when working in small groups, develop similar professional relationships out of which could arise mutual respect, tolerance, and professional deportment.

At a certain point during our translation, the collaborative work itself presented us with a big surprise. One day while discussing the semantic and stylistic inadequacies of the first drafts of the text we had been producing, we had a sudden revelation about teaching the process of revision—not only revision of typical English compositions text, but of student writing in college in general. We noticed that our preliminary drafts of the translation seemed "wounded" (broken, fragmented, lacking coherence, culturally inadequate), and then it was as though we had opened our eyes wider and saw—and felt—that our activity replicated the activity students engage in when revising their own "wounded" composition texts. The cultural dislocations our process of translation revealed forced us to examine the cultural bridges we needed to forge between writer and reader; and by paying attention to the strategies we used, we were able to recognize touchstones by which we measured the efficacy of our outcomes. We identified the qualities in one another that brought us the most success, namely fluency, tolerance, and patience. By traveling through tolerance and patience to arrive at fluency, we were able to test whether or not our translation was a culturally viable, organic whole.

Following is a close reading of a difficult, typical problem. We were working with two sentences whose literal translation from Portuguese makes no sense in English.

> Portuguese: Entrámos no ar da noite. Alguns nódulos húmidos, troncos de roupa escura, dormiam em volta de cinzas.
>
> Literal translation: We entered into the night air. Some humid nodules, trunks of dark clothing, slept around the ashes.
>
> First revision: We stepped out into the night air. Heavy dark clothing, humid tree trunk nodules slept around the ashes.

Additionally, these two sentences do not seem related in a narrative sense either; there doesn't seem to be any feeling of sequentiality when going from one to the other. More difficult to describe is the ambience, the mood of the novel that we wanted to preserve in our English translation. We did not want to translate out the mysterious, quasi-spiritual atmosphere that links this passage to the rest of the work. These are the steps we took to arrive at a version in which our English readers could perceive a strong sense of the Portuguese original.

According to Salema's syntax and style, the comma could indicate that the two nouns,

clothing and nodules, should be related by "in addition," but it wasn't happening here; this too made no sense in English: The heavy dark clothing, [and] the humid tree trunk nodules slept. Alternatively, the comma could also indicate that the clothing is being further described by nodules; in other words, they were in apposition: Heavy dark clothing, humid tree trunk nodules. (Heavy dark clothing [that looked like] humid tree trunk nodules.) This began to make sense to us.

The next item we addressed was the ashes. What ashes? Where? Maria suggested a scene that seemed resonant with the idea: one where groups of people with rough clothing are sitting around the campfires. Then it clicked that the description is of human beings reposing around a spent campfire, "ashes." Here the ashes represent something literal, as there were literally ashes in the place where the fire had been, but surely synecdoche (a figure of speech in which a part stands for the whole) is also at work, the substitution of a part for the whole. The ashes become a signifier with multiple meanings, enriching the relationship between the literal and the figurative—unquestionably the remains of a campfire, and the larger notion of campfire as hearth—the object around which the people with the rough clothing slept. Our final revision of these two sentences is:

> We stepped out into the night air and saw dark, heavy clothing, lumpy human tree trunks, sleeping now around the spent embers.

Here are the cultural and linguistic adjustments we made in order to solve most of our problems; this is a very slowed-down reading of the process:

- We joined the two sentences together by "and," providing the sense of a narrative thread, a temporal relationship between the two. The "and" is unnecessary in Portuguese but, when omitted in English, creates a semantic gap for a native speaker of English.
- We added that we "saw" the figures because, while implicit in Portuguese, it is not immediately obvious in English. The conventions of the reading experience in English demand that the writer provide the reader with a more explicit cue.
- We added the word "now" for the same reason that we connected the two sentences; that is, we provided readers with a feeling of narrative continuity.
- We said "spent embers" instead of "ashes" so that readers would get the sense that more than just the ashes were meant. The word "ashes" is very important in this text because the book is filled with imagery and other figurative language that represent what is left over when a natural cycle is spent: remains, relics, ruins, and even garbage and excreta figure prominently. Salema's purpose is to paint a kind of picture that lurks in the background, part of the underpinnings of the novel, and lends the work its over-all mood and character. Even though the idea is that the people, like tree trunks, are sleeping around the remains of the campfire, it was important, we felt, for readers not to have to puzzle about the ashes. By saying "spent embers," we first call to mind the fact that there had been a fire burning, a strong cue for readers, and we also stress the "remains" of that fire ("remains" like "ashes," a very important word in the Portuguese text), preserving a good deal of that "remains" imagery.

As you may imagine, this example needed several revisions over the course of a week to arrive at the mutual acceptance and satisfaction of the final version. As a result, we feel this passage is a fine one in both Portuguese and English.

Sometimes cultural gaps may be bridged by fabrication. In a particularly interesting meeting we worked on a sentence that told of how one of the characters was delayed in her progress "by checkpoints at intervals throughout the passages of the railway station by the mirrors that the officers, obsessed, set up under the trains." As we searched for clarity, we both, at first, thought this a peculiar image. Dolores first questioned why the officers would be obsessed, and Maria responded that the officers needed to provide results for a repressive, fascistic government, which is a cul-

tural and political experience not handy to the majority of Americans. So the idea began to form that the character was trying to travel but was being held up by the state police, checking for uncredentialed individuals and political escapees. What was with the mirror? Aha, we both said at once; Maria explained how she and her parents had experienced such repression first hand and had preserved the memory of mirrors underneath trains, exposing stowaways. Dolores, on the other hand, said she had seen this image in some old war movies, but the recollection was no less real and no less accessible. Here is our current, provisional translation:

> Her progress was impeded "by checkpoints throughout the train station by the mirrors that the obsessed officers had set up under the trains, just as they do in the movies."

First, this provisional translation makes this image readily accessible to readers in both languages and second, it furthers one of the unifying metaphors of the novel, which is film and the conventions of film-making.

But such discrepancies are not always so easily resolved—this epiphany brought us to reevaluate the difficulties our students encounter when information is being transferred by their instructors and when they work together in groups. It was here that we first thought about the various cultural references of our students, as they worked together in groups. What was the process that resulted from their collaborative search for the right word? Because we ourselves had come to cultural, political, and social understanding from different paths, we thought we could pass on this piece of learning to our students. We began to search for a way to make use of our information. In order to approximate our "method" of respect and tolerance, we needed to find a way to transfer our mental activity into a form that our students could use when attempting to fashion their words so as to accurately represent some mental processes and thoughts, images, and cultural allusions.

When imparting linguistic information to our students we may make reference to cultural allusions and frames that we believe are transparent and belong to them as well. But an accurate linguistic and cultural translation always remains an impossible ideal and because that is so, teachers and students should remain aware that it is a valuable process they undergo when they try to bring the real and ideal together.

In our work, we both began with inner justification and certainty about the way Maria read the Portuguese text because of her proficiency in Portuguese language and culture. But Dolores was equally certain and justified in her certainty when hearing dissonant chords in English and knew they had to be reworked. Reconstructing the metaphors in English eluded us at first, but finally, conquered by frustration, we paused and agreed to listen to each other in a different way. That was how Maria granted permission to Dolores to render metaphoric translations absent in the Portuguese language and once this happened, then the other terms of the text became clear.

We had already practiced a form of "listening to the other" in our classrooms but learned through our collaborative work that we should not precipitously intervene in students' group discussions, even when we are aware of the narrow paths and hyperbole they at times employ to convince each other about, for instance, the relative merits of their homelands. When making reference to the diverse places from which they come, students from Caribbean islands, for example, may praise their land, food, music, and so forth, and will attempt to silence others from places like Africa who contest the "best-beach-in-the-world" status. Our recently-gained insight has led us to allow those students time to revisit their perceptions and opinions and arrive at different conclusions, perhaps by researching the beaches on Fiji, the Maldives, or Mozambique. What has interested us is students' resistance in letting go of weak contentions (which mirrored our own), and we hope that this attentive process of listening will help develop tolerance and so enhance their learning process.

When we applied this method of listening to our classrooms, we were also able to address particular problems of grammar, for example, the absence of endings in the past participle by

Hispanic and Haitian students, among others. We arrived at the idea of speaking about the beauty and complexity of Spanish and French culture and language, calling students' attention to the endings of the past participle: in Spanish *do; da,* in French, *s; se*. We were able then to understand that there is some ineffable, internalized cultural reality that doesn't allow our students to listen to our recurrent explanation, a situation that was mirrored in our own collaboration.

Student responses to this method have been positive overall. J, for example, had repeatedly failed the ACT and had consistently omitted *–ed* endings in his writing. On the middle-semester evaluation of his own writing, he begins his paragraph: "At this period in time in our course I have learned a lot of things that will help me to pass the test...using compound and complex sentences my writing has improved." Additionally, his awareness and ability to correct his use of *–ed* endings led him to understand the broader implications as well: "The brief foreign grammatical and cultural allusions from my teacher are helping my writing too. In using these techniques, I have seen that my English writing is getting better by following these rules."

In another response in the same group of evaluations A, a speaker of Caribbean English says, "Before taking this class, I did not know what I needed to help me write a good, competent essay. Now, weeks into the class, I learned the basics; however, I also know that I have a problem with my verbal tenses, such as where I should add *–ing* or *–ed* endings." A, who is not Hispanic, was able like C, to make wider associations and adds: "Using tenses from the other languages helps me a bit, but I still need more practice. Now that I know what I need help in I will try my best to learn how to write a good essay."

Students gain a heightened awareness of these corresponding grammatical relationships and can return to their English grammar without the feeling that there is a transcendent superiority in American culture, or in any one culture or language.

As we could not hear the cultural dialogue between our different native languages and cultures, so our students could not work through their cultural and linguistic obstacles. Through our work with each other we were able to take a step over to the students' cultural perspectives. Two corresponding ideas are not separated as two grammatical realities, but because of cultural omission they are compartmentalized. Once the barrier is lifted and the two ideas communicate in a freer way, students can begin to associate the Spanish and French past participle with similar structures in English. The two students cited were able to produce meaning and grammatical appropriateness by bridging cross-cultural boundaries. This certainly points to our own inadequacy in recognizing the linguistic richness of our population. Even though we understand English, Portuguese, Sicilian, Italian, Latin, German, and French structures, we are still short of over 100 languages.

In our process of translation, our newfound fluency, cultural awareness, patience, and tolerance contribute to empathy that allows us to say, "I feel your pain."

New Digital Approaches to the Teaching of Foreign Languages

Rafael Corbalán
Modern Languages

Traditionally, learning a foreign language has involved three areas: oral proficiency, written communication skills, including grammar, and cultural knowledge. If we look at how foreign language teaching has evolved, we observe foreign languages taught in a combination of traditional classroom settings, "live situations," such as study abroad programs, and through visual and audio technologies and print media, for example, with tape recorders, videos and newspapers. With the development of digital forms of communications, specifically the Internet, new educational tools that challenge the traditional ways of teaching a foreign language are emerging.

The new digital multimedia tools offer teachers of foreign languages new teaching avenues and measurable advantages. Students can read foreign newspapers, watch television, and listen to radio programs in real time online. Students can also chat with foreign students about issues of common interest. Multimedia tools also bring audio and visual interactions to the class in ways similar to the study abroad programs.

Modern languages departments in the United States have been incorporating new technologies in the classroom since the early 90's. Colleges have invested financial resources to modernize laboratories to take advantage of the digital infrastructure of communication to improve students' language learning experiences. Individual professors have also incorporated digital activities into their teaching, with support from department and college efforts such as grants and workshops. Publishers, too, have updated textbooks to incorporate multimedia exercises, drills, and explanations of grammar. Nevertheless, a number of areas in the teaching of foreign languages haven't been explored, perhaps because they are not financially attractive for publishers or because professors haven't done the required research.

Since 1999, I have been incorporating new technologies into my intermediate Spanish class, SPN 200. Now this course has a number of digital features and assessment tools that I have developed with the help of two grants: Title III[1] and the Visible Knowledge Project[2]. I chose SPN 200 instead of the basic level Spanish course because the 200 level course allows the instructor to use more teaching techniques (such as compositions, essays, and advanced oral interactions) than beginner courses. Most of the SPN 200 students are able to speak the language, but their lack of formal training in it keeps them from writing, reading, and comprehending properly. The most common problem these students have is that they use Spanglish, a mix of English words, grammatical usage, and spelling, with Spanish.

The students and I implement the new technologies in a classroom with computers. I use a collaborative approach to help students learn Spanish by working in groups. The main goal of this approach is to encourage students to use the language in written and spoken ways and to stimulate learning by using the language to share information with each other in the classroom and online.

Besides the textbook, created specifically for this course with professor Eda Henao, SPN 200 also includes the following features:

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[1] BMCC's five year program sponsored by the U.S. Department of Education to enhance student learning in technology and to train faculty in the use of new technologies in the classroom.

[2] The Visible Knowledge Project is a collaborative project by the Center for New Designs in Learning and Scholarship (CNDLS) based at Georgetown University in collaboration with the American Studies Association and the American Studies Crossroads Project, American Social History Project (CUNY Graduate Center), Center for History and New Media (George Mason University), Carnegie Foundation for the Advancement of Teaching, TLT Group with the American Association for Higher Education. The project involves faculty on 13 core campuses, plus a group of 12 independent faculty investigators not on the core campuses. Altogether, 54 faculty on 25 campuses participate in the project's research and development.

- *A* PowerPoint *digital grammar book and exercises.* The *PowerPoint* digital grammar book reviews the main grammar topics included in the textbook. The presentation includes exercises every three or four slides. The students have to complete them first individually and then collaboratively. Students learn efficiently from these exercises when they work in teams and help each other get the right answers. The grammar *PowerPoint* presentation includes compositions, dictation, and texts with mistakes.
- *Dictation done on two different computers.* Each computer is linked to a projector. The professor divides the class into two groups. Each works together at one computer and checks the mistakes of the opposite team. In this activity, the teacher has to define the academic goals of each dictation clearly (for example, correction of Spanglish words, correct use of verb tenses, or correction of misspellings) to maximize the efficiency of the drill. In other activities, such as *Text With Mistakes*, students identify as many mistakes as possible in a given text. Here they also work in teams to review the text collaboratively, with it projected from a computer onto a screen for the whole class to see.
- *Chats and electronic discussions. Blackboard* offers students many different ways to share information and ideas that can be difficult to obtain in a regular class setting. Chats are usually more informal than discussions because students send and receive messages immediately, while in discussions they post their comments on the Internet, which forces them to be careful with their grammar and spelling.

Chats are an excellent way to help students interact among themselves in an informal way, while discussions are a superior tool for working with texts in a more polished way. In my classes, I encourage students to ask me for help with words they don't know or to correct grammar problems. The main goal of chats is to make students feel good about their own skills in communicating in Spanish. There are, however, some rules such as not being allowed to use English or to change the topic of the discussion. Each chat session usually lasts from ten to fifteen minutes, followed by a classroom discussion among the students. Discussions usually take place onsite and the topic remains open in *Blackboard* to be continued by the students online. *Blackboard* enables me to monitor the quantity as well as the quality of students' participation in discussions through the statistics section, which gives information on how many times students have taken part in the activity.

The laboratory for this course has several weekly activities (for example, grammar reviews and dictation) that the professor may assign based on the needs of the class. One is reading Spanish language newspapers on the Internet and writing reports about the news. The goal of this activity is to get students in touch with culture and daily life in Spanish speaking countries. In this exercise, students are required to write a weekly report in Spanish about the most important news in a specific country. The exercise is useful in familiarizing students with the variety of ways Spanish is spoken in different countries.

The assessment tools I am developing for this course as a part of the Visible Knowledge Project are helping me to evaluate the efficiency of the digital tools being used. My assessment methodology examines both the teaching techniques I am using and the progress students make during the semester.

For the first assessment students complete a survey in which they evaluate the teaching techniques being used and make suggestions for improving them. The second set of assessments, which measure how much students have learned, is conducted through several exercises similar in content and structure that compare how much students knew at the beginning of the semester, midway, and at the last days of classes. These assessments measure specific issues related to the objectives and goals of the course. They help me to determine each student's progress during the semester and to identify weaknesses and strengths of the techniques being used. The following charts elucidate more specifically what the second set of assessments measures:

Grammar Assessment

	Sections with problems	Total number of mistakes
Preliminary Assessment		
Second Assessment		
Final Assessment		

The grammar assessment covers all the topics included in the course.

Dictation Assessment

	Misspelling	Missing words	Punctuation	Capitalization
Preliminary Assessment				
Second Assessment				
Final Assessment				

The assessment measures the accumulation of mistakes in each test.

Composition and Critical Thinking

	Spanglish	Clarity expressing ideas	Critical thinking	Presentation
Preliminary Assessment				
Second Assessment				
Final Assessment				

Compositions are limited to a specific number of words. The section on Spanglish is measured by the number of mistakes made. The sections on expressing ideas clearly, critical thinking and presentation are measured on a scale from 1 to 4. All the points are cumulative and they are added together.

Text with Mistakes

	Spanglish	Clarity expressing ideas	Critical thinking	Presentation
Preliminary Assessment				
Second Assessment				
Final Assessment				

Assessment is based on the number of mistakes made by the student. The professor measures what is working, what is not working properly, and what can be improved or modified.

At this point in my evaluation research, I can highlight some conclusions:

1. Students maintain attention and interest more easily when activities take no more than twenty minutes;
2. Activities that are limited to particular issues (such as use of accents or Spanglish, for example) are

more likely to solve specific problems the students have when speaking or writing in Spanish.
3. Students learn at a faster pace with activities in which they share information and work collaboratively;
4. New technologies are constantly changing and improving, which has required me to keep an open mind and continue learning myself.

In addition, I have found that a mix of the best of traditional and digital teaching techniques improves the learning process. Online newspapers, chats, and the resources the Internet offers broaden the students' contact with other cultures, their customs and language, and result in an engaging way of learning the new language. Because online courses are usually impersonal, collaborative learning and other teaching techniques used in traditional classrooms still offer many advantages.

In my opinion, higher education in the United States is moving toward four ways of teaching: traditional classrooms, classrooms with many digital components included as part of the class activities, hybrid courses (which combine online and traditional techniques), and online courses. In this new scenario, a professor has to determine which methods best suit the students' needs and if the use of new digital technologies addresses the goals of a given course.

I Write, Therefore I Learn: Writing Across the Curriculum and Developmental Psychology

Mona Moss
Social Science

There are many reasons to emphasize writing in psychology courses: for its own sake, for its therapeutic possibilities, for its communicative potential, and as a way to record and remember, explicate, speculate, elaborate, imagine, juxtapose, amuse, and play with words. For all these reasons, I believe it is important to increase the amount of writing we assign, communicate that we think it is important, show how useful it can be, and help students acquire and improve writing skills.

Fads and fashions in education come and go like hula-hoops and zoot suits, but Writing Across the Curriculum (WAC) promises to be a more substantial change in the curriculum of the future. Certainly, the people involved in WAC at BMCC have a lot of useful ideas about teaching and learning. Lest we find that cutting and pasting from the Internet renders writing as extinct as spoken Latin, we should look at the unique potential writing has for enhancing learning.

One analysis credits writing with the development of modern thought (Ong, 1982). According to Walter Ong, all forms of communication that we use today are based on organizations common to written text. Written forms allow the products of consciousness to be externalized, stopped in time, and analyzed. It is the form derived from early list writing that allows us concept formation of the generic case. We see an object as one among many similar or different ones instead of as a single case embedded in a unique narrative. Even narrative changes form when written, allowing historical records and temporal comparison. Writing adds permanent data to the human record from which countless generations draw.

For the last year I have been involved in the WAC effort, the goals of which are to help students learn through writing, improve writing skills, and express themselves. The program helps faculty use writing to improve teaching in their subject areas, and provides faculty with assistance while they design writing components. For two semesters, a writing fellow, Karen Steinmayer, assisted me with assignments and grading and consulted with students about their projects. I taught and still teach a Writing Intensive (WI) section of Developmental Psychology (PSY 240) capped at 25 students.

Prior to joining WAC I used a fair amount of writing in all my courses. WAC appealed to me, because I was looking for some new ways to approach teaching psychology, especially methods that allowed students to be active in their learning.

The Fall Assignment: A Controversial Issue

In Fall 2001, I assigned research about a controversial subject as the major writing assignment. At regular intervals during the semester students submitted parts of the assignment for feedback. Students read and responded to each other's drafts. The purpose of the exercise was to construct an argument based on research about the topic. The teaching objective was to encourage students to think about the kinds of information they needed to collect in order to make a decision about a controversial issue.

At first, some students were puzzled by the assignment. Some are so sure about their own point of view that they cannot frame the subject in terms of a controversy. The various exercises required students to define their topic as a decision with more than one potential outcome. Other parts of the assignment asked them to specify which groups of people they would study and to evaluate the quality and quantity of information available about the topic.

Students seemed interested and engaged in what they were doing. They worked on a vari-

ety of issues, some of which I would not have thought to raise. Whether or not adoption records should be sealed by law is an obscure but interesting topic for the many adopted children who grapple with their identity. Other topics students selected included public versus private schooling, whether homosexual couples make good adoptive parents, whether mothers of young children should go to work, whether day care is a good idea for infants, mainstreaming of handicapped teens, euthanasia, and the long-term effects of corporal punishment.

Students found out that statistics differentially apply to some groups. For example, one study reported different effects of childcare on families with different income levels, a finding that may be important for a young woman planning her future. The student who wrote about discipline was concerned that African-Americans report high use of corporal punishment. She found opinion pieces but little research to support the use of corporal punishment. She wrote, in a concluding paragraph that sounded very much like the research studies on the subject, that the evidence suggested negative long-term outcomes.

Two students addressed the issue of premarital sex. Both were raised in traditional, supportive families. One used the information she found to reiterate her own position. The other used the assignments to study the information she located and to understand the reasons people state for or against premarital sex. She concluded that although there are still many good reasons for her to maintain traditional values, she might have to consider changing her mind.

Reflecting on how the semester went in order to improve the assignment for future use, I see many things that went wrong. Some students found only information that affirmed their position. One did not see a difference between legal findings and psychological research, and several did not understand the difference between a report on a topic and an argument about it. Most, though, actually carried out the assignment and learned what I intended them to learn. They identified a research group of interest. They formulated pro and con sides of a controversial issue. They went to the library and focused on their topic. They took a position based on information. A few changed their mind or formed a different opinion about the subject.

I will use this assignment again. The new version of the assignment will build in even more and earlier feedback to students as well as more structured feedback from other students. It will include more explicit instruction in finding and evaluating research sources. I expect and hope it will be even more stimulating and informative as WAC becomes routine in my courses.

The Spring Assignment: Autobiography

In Spring 2002, I used another type of writing assignment. Students did developmental psychology by writing their own life stories and finding points of contact between what they wrote and theories they read about in class. We presume that theories we teach will explain observations, case studies, and experimental data, but the theory only works if it can apply to a large variety of people from different groups. If a student is having difficulty learning developmental theories, I cannot always tell if they are having a learning problem or if they simply find no match with their own experiences.

This assignment to connect theory with personal experience allowed me to see how theory works for students at BMCC who originate from so many different cultures. Students' theoretical autobiographies began to show me which aspects of theory are compatible with their worldviews. Some of their stories mimicked textbook cases, some stories have never been told by any developmentalist, and some stories were just difficult to decipher.

There is no question in my mind that Ms. A had difficulty understanding developmental theories. At the same time, I know that theory must expand in order to understand prophetic dreams as a family characteristic.

> I have experienced family genetics and heredity which has affected me through my life and child bearing years. My mother used to dream about sewing dresses, but she never made good use out of it. Most of the time I dreamt about something before it happened....

> With prenatal symptoms that most of my family members experienced through their childbearing years, I had the same experience. My mother told me about herself, when she was young, she was that stage Identity vs. Role Confusion. This proves Erik Erikson, the identity crisis.

The following vignette is an excellent example of social cognitive theory, a theory many students find intuitively correct. Because role modeling is an easy idea to understand, few students elaborate on what may be its active ingredients, so to speak. Ms. B went beyond her immediate experience. She showed what was modeled, what she recalled, the effects of these behaviors in her childhood and, later in the autobiography, on her adult life. She also showed that she actually studied the details of the theory.

> As a child learning all of these things from my grandmother brings all three social cultural theory principles into play. Through guidance she taught me right from wrong and how to aspire to learn something new like knitting a throw and learning how to make the family's main dish.... Her support provided the confidence I needed to get up on a stage to perform and it was through structure that I was able to achieve making it through junior high school peer pressure, graduating on time.

The following paper showed that Ms. C achieved acceptable understanding of Bronfenbrenner's ecological theory.

> Because my parents were overprotective of me I was kind of scared to be without them. I currently still live with my mother and father and when they go on vacation I tend to be scared in the house alone. College helped me to come out of my shell of shyness. The microsystems best describes the above events ...because my parents have definitely played a big role in my development.

Ms. D called her autobiography "The Cruel Culture of Girlhood and how Barbie Influenced My Childhood." In it, she extended what she knew about sociocultural theory into middle childhood, a highly creative application of this theory.

> Vygotsky's theories discuss what I have always known: If you are not included in the game you will not learn very well on your own. He knew the problems of an outsider. I felt different from everyone else in my class because for starters I was one of the tallest girls in my school.... So, Barbie didn't do it for me. She was small with little feet and little hands and blonde straight hair that always hung neatly about the shoulders and fair skin that was always acceptable. Barbie reinforced my feelings about how different I was from other girls.

Many students find Erik Erikson's theory compatible with their ideas although they do not always elaborate on the details of normative psychosocial crises. An identiy crisis, for example, may be easy to point out but very difficult to describe. Ms. E delved deeply into the effects of sweeping political changes on her nascent identity.

> When I was 10 or 11...the Great Cultural Revolution started. The impact was so big almost everyone was affected...my home searched...denounced classmates...my art teacher's suicide. Schools valued the contemporary political trend more than traditional moral and literate education. Politics became a heavy part of my school life and this changed my identity. I learned more politics than literature and I didn't have a chance to develop my drawing skill.

Also using Erikson, Ms. F wrote a theoretically sophisticated analysis of her concept of men, beginning with a father she described as an absence, a mystery, or a gap in her information. She shows the cyclical reappearance of infancy issues during her intimacy versus isolation challenges in her adult years.

> Erikson's theory also best describes some of my vignettes as well personality development through resolution of psychosocial conflict in normative stages of trust. This is on the intimacy level. I found it hard to love and trust men. After all, I imagine my father left my mom when he knew she was pregnant. What makes any other man different from my father?

Mr. G used a cognitive theory to show how one's view of a parent might change through the course of development.

> I adored my father and thought of him as this great person who never did anything wrong; I wanted so much to be like him. The preoperational stage of cognitive development explains this type of behavior...used symbolic thinking to understand his world. At this stage...the child imagination is also very fertile ground, which in my case was used to create the father that I desired in the time I did not know him.
>
> (From about 12)...the high esteem with which I held my father totally vanished. The many years of broken promises had come to a head. Piaget explains this reaction ...[the adolescent] is more inclined to challenge the decisions that adults make in one form or another.

The following examples show critical responses to theory. Ms. H articulated her life story and although there is virtually no attempt at theoretical interpretation, her introspection is rich, it resembles recent descriptive trends in adult development literature and suggests some positive outcomes for teenage mothers.

> Having the responsibility of taking care of another person at a young age made becoming an adult a little easier for me but it also made it hard. It's obvious why it was easier for me because I was able to handle certain responsibilities that approached when I started adulthood. It was hard for me because I wanted to do things that weren't acceptable for an adult to do. Things such as not paying bills so that I could buy a new outfit, staying out and partying all night and not having to worry about anyone but myself.

Finally, Ms. J concludes and I agree:

> I am not certain that there is one theory that can contribute to the four stages that have occurred in my previous experiences. It's as though one theory is not wide enough but more than one can overlap or contribute to each other in human development.

The autobiography is another assignment I will use again. When I do, I plan to build more opportunities into the course for students to share their work because when they did, their writing became clearer. A less obvious effect was that students learned that some information was very difficult to share; therefore, it required more work to explain, interpret, and understand. In psychology, this is an essential understanding.

Reference

Ong, W. J. (1982). *Orality and literacy. The Technologizing of the Word.* London: Routledge.

"I Would Return to Spain:" Study Abroad in Oviedo

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Modern Languages

One of the students who participated in the Study Abroad Program in Oviedo during the summer of 2002, Mariana, wrote an entry titled "Farewell" in her diary on August 9, a day before returning to New York:

> I never thought I would have such a good time in a country far from my loved ones. This trip to Spain has helped me very much. I saw things; I toured. In short, I had a good time. At the beginning of the trip I wanted to go home, but today, a day before departing I only think of what a great time I had and I thank God for not letting me leave earlier.... To all those who read this diary I recommend the trip and to have a good time because later the only thing left is memories and saying "I've been there." I think that had I the chance I would do it again because I had a great time with all the people that went on this trip. I will never forget, especially you, Paquita. You didn't let me return [to New York] and you gave me flowers to feel better when I wanted to [go] back. Thank you truly, thank you with all my heart.

Soon after we arrived in Oviedo and had the first Study Abroad class, Mariana approached me to tell me she wanted to return to New York. It had nothing to do with the city, which she said was lovelier than she could have imagined, and it wasn't the people who so far, she thought, were very kind, but she wanted to return. Twenty-four hours after arriving, Mariana felt she could not stay for the 28 remaining days of our Study Abroad in Spain. She asked for a travel agency to find out how much the return ticket would cost; she spoke to her family and with her boyfriend and told me resolutely that she was leaving.

When she finished telling me this I took a deep breath. I resorted to all the persuasion strategies I could muster at that moment. I reminded her that she would have to return the grant monies she had received. I felt bad, and I tried to hide it.

"This," I thought, as my chest tightened, "is not in the program." We already know how Mariana's story ends. Throughout the diary that she wrote you could see how her frame of mind changed radically and how she enjoyed and made good use of the month-long stay in Oviedo.

I have started this essay with what in the end was no more than an anecdote that illustrates how the "Hispanic Heritage" course that I taught in Oviedo was the most gratifying and complete experience I have ever had as a teacher. Nidia Pullés-Linares, who went with another group to Oviedo last year, remarked on her return that during the month she spent in Spain with the students she had to be an educator, psychologist, counselor, mother, and even partner in fun. Frequently, we instructors forget that in ideal conditions teaching should include all these roles. Over-enrolled classes and an excess of academic duties to perform during a typical semester prevent us from spending time with our students and from giving them the individualized attention they need. In a course like the one I taught this summer in Spain one can be a dedicated full-time professor in the real sense of the word. Not only does the professor have time that she or he lacks during the rest of the year to assist students, but also students have time to concentrate on their studies that they lack during the regular course.

Moreover, in a Study Abroad course, the curriculum is not limited to what we teach in a classroom, and what you learn surpasses what the subject, in this case 20th Century Spanish

Literature, encompasses. Firstly, we all had to learn to live with each other, which was never explicitly stated and took us all by surprise the first few days. When we teach or study in the place where we live, students and faculty are together only during class hours. At most our disagreements are reduced to whether we share a book with a classmate or have differing opinions in class. This relatively limited contact makes relationships easier but shallower than they are when a class lives together. In Oviedo, we spent a whole morning in the same classroom, ate in the same dining hall, slept in the same building, shared the two computers there to read our e-mail, and chose from the same entertainment list for our free time. And, Oviedo is a small city where you can run into each other.

During the first few days I could tell my students felt somewhat uncomfortable together and the friction showed how different each of us is from one another. As for myself, I couldn't ignore that I was also adjusting, and even though I tried to be independent from the group during non-teaching hours, psychologically I was aware of my presence among them when I wasn't there and of their influence on me even when I didn't see them. We all quickly found our own solutions. I think that Hilma was the first one to adjust to our group living, since she was used to having fellowship outings with her church. She enjoyed the group dynamics, which she reflected in a small play called "Chronicles of a Group of Students in Oviedo" that she read in class two days before the end of the course. In fact, we all tried to accommodate our differences, and by the third week no one spoke without first saying "In my opinion...."

I felt happy to see how everyone was able to match their own tastes and personalities to what a totally new country and people had to offer. And all this within an uncomfortable month: too short to adapt, too long not to. Isabel and Teresa, feeling nostalgic for some Caribbean rhythms, looked for something similar in the cool melancholic nights of northern Spain. From what I gather they found it. On the other hand for history and art lovers—Genara, Marta, Adriana, Kathy—Spain was a constant, never ending fountain of possibilities. I went along with them on several occasions to visit monuments, and, thanks to Genara's and Adriana's curiosity, I found out that the roof tiles so characteristic of Spanish architecture go back to the presence of Romans in my country. All the students surprised me, their teacher, in one way or another. Indiana and Genara with that serene intelligence that characterizes them. Julio, "the blessed amongst women," as Hilma baptized him, with his predisposition to visit small villages and cities in Spain and his ability to spend a month with thirteen feminist women. Mariana with her integrity and sincerity. Marta and Rossana with their easy and calm personalities. Elena and Greer, the only ones in the group who were not Hispanic, with their enormous interest in absorbing the Spanish language and culture. And every single one, myself included, for making this course successful.

Every day, I required that the students read a short story or some chapters of a novel and some related essays on history or literary criticism, for example. Then we discussed their reading in our morning lectures. I also asked them to write two reports a week about their cultural experience in Spain. By the end of the month they had two exams, one on Spanish literature and another on Spanish culture. They also chose their own topic and made oral presentations about an aspect of Spanish culture such as the language, food, society, immigration, politics, economy, or customs.

Yet, this is a course in which the teaching hours are but a tiny part of a program that complements and enriches students and teacher alike once the formal class sessions are over, and it responds to the various interests of each student. That is why grading the students that sign up for these courses is, in truth, an art. Even though we must still use the putatively objective criteria of exams, presentations, and homework, we know there are other factors, much more difficult to measure, that count when we evaluate students and assign final grades. For instance, one student was from Trinidad, and although she spoke Spanish (and that is why she was in this group), she was not as fluent in the language as other Hispanic students were. Therefore her essays and oral presentations were not as good, from a linguistic point of view, as those of the native speakers. But I

could see her progress in only one month, and this was a decisive factor for me in determining her final grade of B. As a teacher, I spent many hours with the students in this course and got to know them so well that I couldn't just rely on the grade of an exercise or an exam.

As the years go by, the three credits students earned from the "Hispanic Heritage" course in Oviedo will not be important to them, nor will the fact that they got an A, B or C. Even during the course itself, I never felt students' obsession for passing the class or obtaining the credits they needed in any way possible that we see in students when we teach a regular course. In truth, the only worry that the participants of the Study Abroad Program had was to learn as much as possible about the place they were staying for the month. They visited sights, attended Spanish culture lessons with a professor from the University of Oviedo, talked to different people, began to understand the peculiarities of the Spanish language as spoken in Spain, tried new food, bought regional products and crafts, and had fun. In short, they learned. And that is why they all passed this course without the usual toil and with good grades.

Note:

Although my students were full time, I was traveling with my twelve-month-old daughter whom I was still nursing, and who obviously depended on me more than any other person. I owe being able to dedicate all the time needed for my students to enormous help from my husband, who came with me on this trip, and to my parents' help. They live near Oviedo and spent many hours with their granddaughter. I dedicate this article to my parents and my husband, for making this course possible and to all the students who attended the 2002 summer program and to my daughter Jacinta.

Use of New Media to Encourage Constructivist Learning

Suzanne C. Schick
Speech, Communications, and Theater Arts

A course about the media seems a natural for student-centered learning. Yet, until recently, covering all the material on the mass media course syllabus meant my lecturing almost all the time. SPE 245, Mass Media, is a required course for all majors in the Corporate and Cable Communications program and the Multimedia Programming and Design program and is an elective for liberal arts majors.

SPE 245 focuses on the relationship between media and society. The semester lends itself to a three-part division. First, we discuss methods of analyzing media and briefly review the history of communication from cave painting to electronic media. Second, we examine various media—newspapers, magazines, books, radio, television, film and new media—in terms of their development, current state, and future possibilities. Finally, we consider societal, regulatory, and legal issues. The students write a report on a book concerned with media and society during the first half of the semester and an analysis of an article on a media issue during the second half of the semester. There are three quizzes relating to the reading and the lectures and a comprehensive final examination, as required by the department.

My Visible Knowledge Project

The Visible Knowledge Project (VKP) involves a 22-college consortium that seeks to investigate the use of media in creating a constructivist classroom with the teacher modeling expert learning behavior for the students. Individual educators involved in the project are developing studies to examine questions generated by their teaching. I chose SPE 245 because, of all the classes I teach, it was the one most concerned with media and the one which used media the least.

Two things concerned me about this class. First, with the proliferation of new media, it has become more difficult to get to the issues section of the course without running out of semester. Second, although the course is about media, the students and I were using very little of it to study the media itself, and my teaching style remained traditional, with a top down hierarchy of learning. Therefore, I focused my Visible Knowledge Project on whether I could employ the media to develop a more student-centered method of teaching and whether using media in this way would speed up the process of addressing the first portion of the class, so that we would have more time to examine issues. I was also interested in students' perceptions of which method they preferred and why.

Key Learning Activity

For two years now, VKP has held a three-day Summer Institute at Georgetown University for the people involved in the project. At the Summer Institute, the participants are divided into a number of small, working groups that meet several times. Each member of the group presents his or her project, in various stages of completion, and receives feedback from the other group members.

Based on the input I received from my group during the VKP 2001 Summer Institute, I set up the following activity as a pilot study. I taught the units on print media in my usual, traditional, lecture style. When I came to the broadcasting units, however, I tried a different approach. The students read the chapters on radio and television as usual. But then, I divided them into small groups, one of which I joined myself. Each group was to come up with at least one question in each of four areas relating to broadcasting: the history of each medium, its technological development, what the medium will look like in the future, and the relationship between that medium and societal needs, attitudes, and behavior. We then collated the questions and reduced them to seven or eight questions we felt we wanted to answer. Each group chose one of the questions, and the class went

to the Media Center where every student had access to a computer to do research on the Internet to find the answers. I suggested some web sites, but the students were not restricted to these sites, and I encouraged the students to share web sites if they thought another group could get information to answer their question on a particular site. I also encouraged students to understand that there may be more than one answer to a question. Each group was to present an oral report on their findings, accompanied by a one-page summary and three possible examination questions based on their findings. Finally, I surveyed the students about what the strengths and weaknesses of each teaching style were, which they liked better, and through which they learned more.

I brought the results of these activities to the 2002 VKP Summer Institute. My working group at Georgetown provided feedback that I incorporated during the Fall 2002 semester. Historian Mills Kelly gave me an intriguing idea. He suggested that, next time, I teach the material backwards, starting with new media and working my way back to print. This technique, which has currency in the field of history, gives students a chance to start with things that are most familiar and work their way back to what is least familiar. I tried this approach, which had the effect of shifting the emphasis of the class towards electronic media, but it shortchanged the discussion of the First Amendment, which usually occurs during the newspaper section of the course.

During the course of the semester, I asked students to participate in two surveys—a "first day" questionnaire regarding their expectations for the course and an "exit" survey in which I asked them to compare the traditional lecture method with the non-traditional inquiry method. These documents are attached at the end of this article. The first unexpected response that I encountered was what I perceived as distrust. Although I was careful to explain the project fully, and although all surveys were anonymous, students were sure there was a hidden agenda to my questions. Popular theories were that the survey was some kind of writing test, intelligence test, or hidden quiz. As a result, many of the responses I received consisted either of platitudes or of direct quotations from the syllabus for the class.

Secondly, I found that students' responses fell into three categories. The first and smallest group indicated that some students apparently thrived no matter what method the class used. These students consistently functioned on all levels of thinking, from description ("what is..."), to interpretation ("how does this relate to other things we have looked at..."), to analysis and opinion. They asked good questions and made many meaningful suggestions on the exit survey.

The second group of responses was from what I came to call the "good" students. This group was by far the largest of the three groups. Our educational system has taught these students that getting good marks is the goal of good students, and the way to get good marks is to figure out what the teacher wants and regurgitate it for the instructor on examinations and papers. These students were the ones most uncomfortable with the ambiguity of the inquiry method and said that in the lecture method they could be sure what the teacher wanted. They were also the students most concerned with how working with other students might negatively affect their grades.

The third group, also small, consisted of apathetic responses from students whose motivation for taking the class seemed vague. Their "first day" responses to the question "Why are you taking this class?" ranged from "It was required" to "It fit into a gap in my schedule." These students were the mirror image of the first group, and changes in approach did not help them function better. As a matter of fact, they proved to be a hindrance to others in group work and at least did no one else harm when the lecture method was used.

Conclusions

So far, I seem to be dealing with many unexpected results. The two most disturbing are student distrust and the idea that school consists of "psyching out" the instructors and repeating back to them what they want. These problems are systemic, contextual problems rather than content problems.

As for my own classroom, this research has challenged my basic assumptions about what

students want or expect from this course. Reflecting on their responses, I think switching from the lecture method to a more student-centered approach was confusing to them. My next step will be to redesign the course to make it entirely student-centered and to see what happens if I teach the whole course using group work and other student-centered techniques, including an online discussion group. I will do a lot of preparation—"front-loading"—before the course begins for this to work. At this point in my research, I do not know how new media taught with constructivist methods will work for me and the students, but the interim results have intriguing implications for my course and for restructuring the educational experience as a whole.

Visible Knowledge Project
Fall 2001 First Day Questionnaires

1.	**What do you expect this course to cover in terms of content?**	
	Issues about the media	7
	Information about	3
	What is mass media?	2
	About a specific medium	2
	Needed for major	2
2.	**What would you like to know about this subject at the end of the term that you do not know now?**	
	How to advance my career	3
	History of the media	4
	Deeper understanding of media and society	5
	What it says in the course syllabus	4
3.	**What would you like to be able to do at the end of the term that you cannot do now?**	
	Understand media better	7
	Analyze media and see connections between media, business, the arts, etc.	3
	Improve career prospects	2
	Write a grade "A" book report or do research more efficiently	2
	Don't know	1
4.	**Do you have any concerns about this class or statements you would like to make?**	
	No or blank	6
	Connections between mass media and society, business, etc.	3
	Good grade	2
	Outside speakers, site visits	3
	Well-rounded person	2

Visible Knowledge Project
Fall 2001 Exit Questionnaires

1.	**What were the benefits of the "Lecture" method?**	
	Informative	6
	Allows student to know what is on quizzes/tests	5
	Allows student to ask questions at the present time	4
	Learn teacher's style	3

	Important facts emphasized	3
	Allows note taking	2
	Easier to remember	2
	Focused	1
	Less stress on/work for student	1
	Makes student read the book	1
	Moves more quickly	1
2.	**What were the drawbacks of the "Lecture" method?**	
	Boring	8
	Students cannot express themselves	3
	Instructor cannot become engaged with students	3
	Students might not be interested in the topic	1
	Limited feedback from students	1
	Students may not feel comfortable asking questions or saying they do not understand	1
	Rote learning	1
	Does not involve other senses	1
	None	1
3.	**What were the benefits of the "Inquiry" method?**	
	Encouraged teamwork	9
	Students discovered more information on their own	6
	Taught research skills	4
	Interactive	4
	Students are on their own time	4
	Deeper insight	3
	Number of different sources	2
	More intimate	1
	Got to use the internet	1
	Got to laugh and joke around	1
	Caused me to review the chapter more	1
	Got out of the classroom environment	1
	Hard to forget because we found it out ourselves	1
4.	**What were the drawbacks of the "Inquiry" method?**	
	Some team members did not pull their weight	9
	Limited time, or took too long	8
	Hard/too much work	3
	Poor question selection	1
	Uninteresting topic	1
	Too much information all at once	1
	Conflict of opinion with other group members	1
	Hard to organize and present to class	1
	Problem for those not computer/research literate	1

MAT 150: E-Teaching and Learning

Nkechi Agwu
Mathematics

As a Title III participant in the Spring 2000 semester, I developed MAT 150 - Introduction to Statistics into an electronically-distributed course. At that time *Speakeasy Online Course Management Software* was the primary instructional delivery system I used, though in later semesters I replaced *Speakeasy* with *Blackboard*, the software licensed by CUNY for e-distributed and distance learning courses. I also used *Excel* for statistical analysis, *PowerPoint* for presentations, and *MS Word* for writing activities. This model was honored with a 2000 American Mathematical Association of Two Year Colleges (AMATYC) Input Award for innovation in line with AMATYC's *Crossroads Standards* (see Cohen, 1995).

In the Fall 2000 semester I enhanced MAT 150 further within the Writing Across the Curriculum (WAC) Program, integrating intensive writing in the course. Finally, in the Fall 2001 semester, I adapted it to a distance-learning course within the Distance Learning Program.

The goals of my MAT 150 course are:

- To help students construct statistical knowledge and cultivate the skills and habits of mind necessary for informed citizenship, leadership, and life-long learning; and
- To prepare students for the challenges of the workforce in the age of information technology and a period where quantitative literacy is an essential skill.

The course achieves these goals through three capstone activities that involve technology and are intertwined with mini-projects, discussions, presentations, and each student's statistics homepage. This article describes the course's three capstone activities and their connections to other class activities.

The Collaborative Research Project

The students' collaborative research project gives them an understanding and appreciation of the process of conducting a statistical study. For this project, students use the discussion board in *Blackboard* to select their group members and the topic they want to investigate. Once groups are formed, I create group pages to allow each group to communicate through a private discussion board, e-mail, the virtual classroom, and file exchange. Through continuous communication with each other that may sometimes involve face-to-face group meetings, groups develop their problem statement (research questions, background, rationale, significance, and expectations) and research plan (data collection and analysis methods). Then they survey at least 40 people, collecting data to answer their research questions. They organize the data they collected in a table or spreadsheet. Then they analyze the data using uni-variate and bi-/multi-variate data analysis techniques and draw conclusions about the topic they are investigating in answer to their research questions. Finally, they write a comprehensive report (problem definition, research plan, data collection, data organization and analysis, conclusions and inferences) of the project and present the highlights of their project to the class through a *PowerPoint* presentation they attach within the discussion board.

To support the groups' conceptual understanding during the different phases of their project, I assign them mini-projects, which involve critical reading, data analysis and technical writing of statistical reports. For their mini-projects, students have conducted a Jordarche Jeans market survey; researched the pros and cons of graphical presentations; analyzed crime at BMCC; or done homepage activities, student survey activities, web projects, or disciplinary focus assignments either from the required text or developed by me.

Students experience first-hand what is involved in the design, planning, implementation, evaluation and dissemination of a statistical study that involves conducting a survey and that requires collaboration with other researchers and the use of human subjects as participants of the

survey. This collaborative research project enables students to facilitate the development of all aspects of mathematical power and to enhance their technological, interpersonal, and leadership skills. It engages them in meaningful real-life statistics, enriching the course in a multicultural way through the diversity of projects and empowering students by providing a forum for them to select, investigate, and report on the issues of their choice. After students effectively complete this project they have a deep appreciation of the field of statistics, its significance, its practice, its uses, misuses, and abuses.

The Term Paper

In another assignment students write a paper of 15 pages minimum in which they discuss the definition of statistics as a field; the historical development of the field of statistics and its contributors; the importance of this field to their major, to everyday life, and to national development; the methods of practice in this field; and misuses and abuses of statistics. To write this paper, students interview an experienced professional working in the field of their major or intended major. For extra credit, they can perform a participant observation interview where they observe the practitioner on the job for a period of no less than half a day's work. They transcribe this interview and attach it as an appendix to their term paper. A few weeks prior to the interview, they post their potential questions and the background information of their potential interviewee on the interview discussion board. They also respond with feedback to at least one classmate's questions and revise their own interview questions based on the feedback they receive. The actual interview experience has been significant in enhancing their appreciation of why statistics is important and its connection to their major.

Additionally, I assign a variety of discussion board activities that focus on the different topic areas I expect students to discuss in their term papers, namely, what is statistics; statistical bias, biased statistics, misuse and abuse of statistics; the history of statistics and its contributors; data collection and sampling, data presentation and analysis, statistics from the perspective of my major; statistics in my everyday life; and statistics from the perspective of national development. I intend these discussion board activities to provide them with information from different sources pertaining to statistical concepts and topics they will address in their term paper and reflective portfolios (see the third capstone assignment below) and to facilitate reflection on these concepts and topics.

The Reflective Portfolio

The reflective portfolio facilitates students' conceptual understanding and helps them develop the skills of reflective practice. It is a written journal in which students document their understandings, misconceptions, and questions about the concepts they are studying through the assigned readings and activities. In their portfolio students reflect on what they are learning, how they are learning it, and the aspects of the course that have facilitated or hindered their conceptual understanding. The various discussion boards for the course support students in reflecting on the course concepts. The homepage activities also support students in writing their portfolio since students have access to each other's homepages. On their homepages, students briefly share their ideas about statistics and share their responses to the student questionnaire. They create a spreadsheet of their profiles and demonstrate their understanding of uni-variate data analysis for qualitative and quantitative variables. Students highlight three significant learning activities from their portfolios that they present as *PowerPoint* presentations to their classmates in the discussion board.

Assessment

Student assessment of the course so far has been positive, based on my faculty evaluations and on their electronic portfolios in *Blackboard*. Throughout the students' electronic portfolio they emphasize the peer- and professional-mentoring that takes place. They say that they leave the course

at the end of the semester feeling empowered, particularly with regard to literacy (verbal, analytical, quantitative, technological), collaboration, and their statistical knowledge base. Highlighted below are a few reflections by students quoted directly from the discussion board.

> Statistics, MAT 150-999, has been a challenging but rewarding experience. It required a thorough knowledge of the computer and the World Wide Web. The course also challenged me to stretch my brain and patience. The workload was overwhelming, but it was worth it all. I feel I have actually absorbed some knowledge about basic statistics.
>
> Talking with an experienced researcher in my field is an important task. She informed me of how important statistics is in Midwifery and how rare it is for a midwife to have a grasp of statistical knowledge. I know that understanding the basics of statistics will help in patient care.
>
> The most difficult and most rewarding assignment was the collaborative project. We enrolled in an actual statistical study. The difficulties and advantages of working as a group making a study were literally reflected in the process of our project and the greatest feeling was of creating real and useful data.
>
> I developed my computer application skills. Even though I already knew the technical part of making a graph or chart, I gained a lot of knowledge on data presentation and analysis of the graphs. This knowledge was very important for me because of its close relation to the career I am pursuing: multimedia programming and design.
>
> This class as a whole was a wonderful learning experience that not only allowed me to explore statistics, but technology and life as well.
>
> Before taking this course, my perception of statistics was mainly negative. I believed it was a subject that only dealt with numbers. Now I can use statistical terminology in conversations and I realize that there is more to the subject than just gathering data. In many professions it is mandatory that you know statistics.... In my profession, I am continuously using aspects of Microsoft Office. However, it seems as though my knowledge of MS Excel increased tremendously after such an intense semester of inputting data to output graphs.

Conclusion

So far, I have taught twelve sections of this e-distributed/distance learning course since Spring 2000, serving approximately 360 students. Three of these sections have run as distance learning sections since Fall 2001 semester. This Fall 2002 semester, I am teaching three sections of this course with one of these sections running as a distance learning section, serving approximately 90 students. To date, I have mentored three mathematics faculty members to develop and teach e-distributed and distance learning mathematics courses. Additionally, a student I am mentoring in the Collegiate Science and Technology Entry Program (C-STEP) and the Mathematics Department Research Program is developing web pages to highlight this model and the exemplary work of students who have taken this course (*http://www.bmcc.cuny.edu/titleIII/index.html*).

The experience in e-course faculty development and the e-teaching/learning of MAT 150 also has empowered me. The additional interaction with students helps me to get to know them, especially their backgrounds, their strengths and their weaknesses, much earlier in the semester. Using technology and writing as teaching and learning tools has helped to transform the class into a learning community where diversity and student voices are evident, and I have developed my skills in facilitation and in managing groups and discussion boards.

I hope this article conveys the value-added educational and professional experience that students and instructors can gain from the integration of technology and intensive writing into their courses. Special thanks to the Title III Program, the Writing-Across-the-Curriculum Program, and the Distance Learning Programs for helping me to develop MAT 150 as an e-distributed and distance learning writing intensive course.

For Additional Reading:

Cohen, D. (Ed.). (1995). *Crossroads in mathematics: Standards for introductory college mathematics before calculus.* Memphis, TN: AMATYC.

Teaching Online: How Do We Think About Our Craft?

Lisa Rose
Social Science

Almost 20 years ago, Maxine Greene (1984), the seminal, indefatigable, and progressive educational philosopher implored teachers to "think about our craft." She described this reflective process as "an internalized dialogue through which (as it were) we talk things over with ourselves" (p. 55). She wrote that to stop and think is indeed difficult as we all get caught up "in the dailyness, in the sequences of tasks and routines" (p. 55).

While much of her work has been with young children, and indeed this particular article may have been directed towards teachers of school-aged children, her counsel is nonetheless instructive for educators of adults. Greene's suggestions seem applicable to our urban community college as she urges teachers to look at how our diverse classrooms create opportunities and challenges:

> The crucial point is to focus energies in such a fashion that different students, taking different paths, are enabled to learn the appropriate language or notation or symbol. Each is a perspective after all; each provides a new opportunity for structuring experience; each offers a distinctive lens through which to attend to the lived, intersubjective world. (p. 58)

It is particularly critical that we who have plunged into the world of on-line teaching "think about our craft." Like automatic piloting, there is a routine to online teaching, an order of things. After a few semesters, if left unattended, online courses run the risk of becoming flat as though they are teaching themselves. It becomes easy to neglect pedagogical considerations when using a medium where students "have no choice but to become active learners" (Hoffman, 2002). It's at this juncture in my own career as an on-line teacher, having taught at a distance for four semesters, that I thought it was time to reflect on my own practice and, as Greene suggests, to think about my craft.

In the fall of 2000, the Borough of Manhattan Community College began its Distance Learning Initiative, under the guidance of Professor Jane Paznik-Bondarin. From its inception, Jane insisted that the "pedagogy must drive the technology." Consequently, those of us who developed our courses with her guidance "grew up" considering our teaching, what was most important to us in face-to-face classrooms, and how we needed to conceptualize the re-tooling of those priorities in the virtual classroom.

It was exciting to think that some of the most important values that under-girded my face-to-face teaching would not only *not* be lost in the virtual medium but might, in fact, be strengthened. Freire's pedagogy of empowerment and community building has resonated for me as a teacher and a professional social worker for many years (see Freire & Macedo, 1998). Hardwick (2000) notes that "perhaps no better forum for testing... Freire's... egalitarian classroom exists than in a distance education setting. When teachers and students are linked at a distance, opportunities for encouraging each player's equal role as a member of a learning community can be maximized" (p. 126). But have I managed to incorporate these values into my online teaching? Have I applied what Hardwick calls the "organic approach" to learning, which emphasizes the value of knowledge actively constructed through inquiry where "[s]pecific content is thus often less important than the ability to pose significant questions to learners and let them pursue the answers to these questions" (p. 126)?

At the heart of most online courses at BMCC is the "discussion board," the asynchronous threaded discussion forum where the instructor usually posts questions related to course material that students must respond to. The discussion board is the focal point of what Hardwick calls the "egalitarian" classroom. The relative anonymity of the virtual classroom may open up opportunities for students to participate. And, because attendance in my online classroom is graded via dis-

cussion board participation, everyone must post, or they'll be marked "absent." Yet my question remains, have I encouraged a sense of community among students? Did I pose questions that stimulated inquiry? Did my own comments to the discussion board stifle students or did they encourage further questioning? Was I too authoritative or too aloof?

BMCC uses an internet educational software platform known as *Blackboard*. Each semester's courses are archived (saved) and can then be used as a template for the next semester's course. As the entire semester's discussion board is saved, the instructor has an opportunity to analyze and reflect on these types of questions. Nothing is left to faulty recollection; it's all there. I decided to venture into the archives and look critically at my own participation in the discussion board forums and ask myself, in former Mayor Ed Koch's inimitable parlance, "How'm I doing?"

The course that I teach on line is Human Services Field Work II. It is a seminar intended as a capstone experience that integrates knowledge and skills in Human Services learned over the course of four semesters with a half-year social service field practicum. In the particular forum that I chose to re-visit, students were to have read a lecture and additional materials related to the topic of working with "clients from different cultures." The specific questions I posed on the discussion board were:

> Is it important that a worker be ethnically, racially, culturally similar to the client(s)? Why? Why not? Who do you work with in your agency? Clients that are different or similar to you? Do your differences/similarities make you more effective or less effective? Why? Why not?

By asking these probing yet open-ended questions, my intention was to create a forum for honest reflection and questioning. I did not intend to create what Freire criticized in traditional education, called the "Banking Approach," where the teacher has all the information, all the power, and all the right answers (Hardwick, 2000). In my mind there were no right answers. I posed these questions intentionally, as a technique to prod students to think critically.

However, when I looked back, I found that some of the students had responded with comments like: "I went into this field to help people, regardless of race color or creed." Or "As human service workers, we are trained to look past our differences when helping clients." What had I said to discourage students from answering honestly and candidly? Freire and Macedo (1998) describe opportunities for students to create a "word universe," where they can express "their actual language, their anxieties, fears, demands and dreams. Words should be laden with the meaning of the people's existential experience, and not the teacher's experience" (p. 11). At one point in the asynchronous discussion, I attempted to direct the conversation away from the more polished responses. I posted to the board a comment about one of the articles the students were to have read:

> I think that one of the points the author was making is that the sense of alienation immigrants can feel is acute (sharp). Can any of you who have come to this country as children or young adults relate to these feelings?

This prompt did in fact seem to loosen the discussion. A few days later one student wrote of her own arrival in this country as a teenager:

> [T]here were times when I missed home and wanted to be back there. Even though this country has many things to offer, at times I missed the warmth of being with my loved ones... During those times I didn't see what this country has to offer and I felt like I was worse (off) here than I was over there.

Another student wrote about her internship in a nursing home. She commented that even

though African Americans rarely send relatives to nursing homes she was able to work with residents of a variety of cultures. She wrote: "I think my uniqueness makes me more effective." While these students' comments reflect the kind of self-reflection I was after, I wondered about the stiffness, the guarded quality of many of the other posts.

Through this process of "thinking about my craft," I considered the possibility that I may have unwittingly discouraged the very openness that I intended to stimulate. Or perhaps I encountered a perverse effect of the virtual classroom. Was there a sense that the omnipresent teacher (big brother) was judging the student's ideas in an unforgiving medium? Clearly there are no pat answers. In the end, Greene (1984) reminds us that in fact we can't take students by the hand and *lead* them where we want them to go:

> Those of us who view ourselves as teachers rather than as trainers know in a very particular way that what we offer–and and even what we demand–has to connect with student interest and need and concern. Students have, in some sense, to consent to what we are communicating; they have to choose to acknowledge it as somehow relevant to their own sense-making. And then they have to try it out with all the risk of error that entails, for themselves (p. 57).

Nonetheless, distance learning courses present us with invaluable opportunities to reflect and to then develop new strategies that can help us to be even more effective teachers.

References

Greene, M. (1984). How do we think about our craft? *Teachers College Record 86*(1), 55-67.

Freire, P., & Macedo, D. (1998). Literacy: Reading the word and the world. *Thinking 14*(1), 8-10.

Hardwick, Susan, W. (2000). Humanizing the technology landscape through a collaborative pedagogy. *Journal of Geography in Higher Education 24*(1), 123-129.

Hoffman, D. (2002). Internet-based learning in higher education. *Tech Directions 62*(1), 28-32.

Zukas, A. (1999). Cyberworld: Teaching history on the World Wide Web. *The History Teacher 32*(4), 495-516.

"The Happy Family:" Scholarship and Teaching

Joseph Ugoretz
English

A famous circus and sideshow exhibit is called "The Happy Family." In this exhibit, after paying a dime, audiences would encounter a lovely, verdant setting, with a live lion and a live lamb lying together and living peacefully. This exhibit always attracted large crowds and was very successful. It did tend to use up a lot of lambs, though.

If I can extend the metaphor maybe more than it deserves, the scholarship of teaching frequently presents a similar scenario. Teaching and scholarship, practice and research, too often resemble the lion and the lamb. They live together peacefully for a while, but eventually one ends up swallowing the other.

It often seems that the two kinds of work—the work we do in the classroom and the work required to thoroughly study and analyze the classroom work—are mutually incompatible pursuits. This is even truer when we add the elements of technology, computers, and the Internet to our teaching. Pedagogy enhanced by technology is, as we know, the "movement of the moment." There is a rush to enhance or take online or make "interactive" or "multimedia" just about every element of teaching in every subject for all students. New and exciting curricula and pedagogies are available to us, but learning to use them and making sure students get the most out of them takes time and energy. As teachers, we have to learn things we've never done before, and often we have to examine the foundations of our educational goals and philosophies to see where these new technologies fit in. The "lion" of trying, perfecting, adjusting, and implementing new teaching strategies often consumes the "lamb" of thoughtful examination and research to study the effects, purposes, and goals of these new technologies.

The Visible Knowledge Project (VKP), for which I am the BMCC campus coordinator, is a five-year project aimed at improving the quality of college and university teaching through a focus on both student learning and faculty development in technology-enhanced environments. Through the VKP, over 70 faculty on 21 campuses nationwide are working to conduct scholarship of teaching research projects. We're trying in our varied classes and disciplines not only to implement new technologies and teaching styles, but also to study and research our teaching and students' learning and how they are affected by the use of technology.

VKP tries to use the tools of technology to enhance our scholarship, as well as our teaching. Through such tools as online discussion, electronic posters, video, videoconferencing, electronic triad discussions, virtual affinity groups, online working groups, and so on, we share and improve the results and process of our scholarship.

My own VKP project ("Casting Wider and Digging Deeper: Science Fiction Online") is one example of this process. My project is based on my online course, English 337, Science Fiction. Few courses could be more reliant on, and influenced by, technology than an online course. Except for one in-class meeting at the beginning of the semester, all the work of the course is conducted through the *Blackboard* course management system over the Internet. The bulk of the course work is carried out on the discussion board. Students read every post, post their own thoughts and ideas, respond to others, and reply to other students' responses to them.

The discussion board is the heart of the course. When I teach the course face-to-face, I also center it around discussion, but I feel a constant tension between "covering" the stories, opening up broader issues, involving as many students as possible, and managing and controlling digressions. When I teach the course online, I see a higher degree of involvement in the discussions. But I also noticed from the first time I taught the course online that digressions, "topic drift," need less managing online than in a face-to-face class. In an online class, students seem more open to pursuing new lines of thought and making personal connections. It seemed to me that online, asynchro-

nous discussion was allowing a different kind of student learning to take place, one more in line with my deeper goals in the course.

This observation became the basis for my VKP project. I was interested in a group of related questions. How does asynchronous discussion in an online literature class affect students' appreciation and understanding of personal and philosophical issues? What are the advantages and disadvantages of this kind of discussion? What are the implications for pedagogy? How do we connect online teaching to face-to-face teaching, and how do we adjust face-to-face pedagogy to make it work in the online setting?

These are complicated and broad questions. They are questions that would take time to investigate and that, in some cases, caused me to articulate my own goals and philosophies in teaching the course. This is where the VKP approach became most useful. Through discussions with my VKP colleagues nationwide and here at BMCC, I determined that the best way to investigate these questions was to focus on a key learning activity. To find a path into this kind of scholarship, I needed to look specifically at one aspect of the course and student learning. I chose to focus my research on the discussion board.

Because this course is carried out entirely online and all discussion takes place asynchronously, students have more opportunity for reflection and careful attention to what they and their classmates "say." But even more importantly for my research project, every part of every discussion leaves a written record.

Online discussion is lasting. Discussion in a face-to-face class, even if the professor or students take notes, is ephemeral. After the class is over, some key points are retained, but only rarely, if ever, is the whole discussion available for research and review. In asynchronous online discussion, however, every comment is preserved and available.

Students and teachers alike are able to look back at previous (even long-past) discussions and compare and track and then analyze the learning process. For the classroom researcher, the amount of accessible, and manageable data is unparalleled. This has been a vital advantage in my research. Online discussion makes it possible to pinpoint changes in student responses, moments of new awareness and analysis, and new ideas that would otherwise be lost in the flow and uproar of a lively conversation. For example, in a discussion of Mary Shelley's *Frankenstein* and its connections to the deeper issues of creation and parenthood, a student comments:

> Creation. I don't believe that parents are allowed to take away our lives. How much did they consciously do to create us, besides the hanky panky. After that nature took its course. Our parents didn't actually sit there and divide the eggs over and over for nine months. And yes I believe our parents have an obligation to feed us, clothe us and provide a shelter over our heads.
>
> Does that mean that they have to buy us everything we want? NO? At a certain point we become adults and must leave the nest. In the animal kingdom all offspring leave the nest once they have reached maturity.... Some believe God creates us? What about test tube babies or... cloned humans? I don't want to stir up any controversy, because this is a real big issue. But if a scientist has "created" a human in a lab, does he have the power to "uncreate" it? My personal belief is no, a life is a life, but I am also pro-choice. The question of creation in this discussion board can easily be reinterpreted as an abortion question - Once an egg is fertilized can it be destroyed? Are we obliged to take care of our parents once they are older? NO!... If parents have been good to you and cared for you, why not repay them.

In this excerpt, the student raises a lot of ideas that in a face-to-face class might not reach all students and might not be picked up or developed. But because the discussion is online, and

asynchronous, students have time to look carefully at each point being raised, to examine the "controversy" this student doesn't want to "stir up" and to process and critically examine each of the points.

Students also make many deep connections to their own experiences and their own ideas, incorporating the learning from the discussions into their lives outside of the classroom. In a final discussion board summing up and evaluating the course, one student reported:

> This course has been a good learning experience for me and I find myself discussing it with my family members all the time, especially my 16 year old son.
>
> And
>
> I don't know if "learned more" is the right expression. I do know that I had to really read the stories to be able to fully participate on the boards and to understand other students' points of view. I have always participated in the classroom setting as well, but because we had to write so much, it made me think more about the subject and oftentimes brought up the subject over the dinner table to get others' points of view.

Because students can look back, they can examine the process of their own learning and make the meta-cognitive deductions that help them implement and engage their new skills. Not only their own learning process, but that of their classmates as well, is made "visible" and is persistent and available for them to consider. One student reflected in his final paper:

> [Faith vs. Science] was my favorite theme mainly because there is so much to talk about. It's interesting because nobody really knew what to believe. Everyone was just stating whatever they believed, at first. But then someone else said something that made a little more sense than the previous one, so people tended to lean towards that comment. And the next comment made more sense than the previous, and so on and so on. That board had me reading everyone's posting. Everyone could've easily argued with one another, but everyone was very respectful towards their classmates and accepting about what they had to say.

Asynchronous online discussion provides the element of time to consider, reflect, review, and re-comment. All the data, all the evidence for my research is available and permanent, collected automatically by the on-going process of the course itself. In this case, the lamb is protected from the devouring lion, and, in fact, it's the power of the lion that does the protecting.

My research is ongoing, and my conclusions are preliminary, but by studying the persistent, visible evidence of my students' discussion board postings in the calm and quiet after classes have ended, I'm able to see that online asynchronous discussion can be a valuable tool in a literature classroom. I see that it lets students be thoughtful, make deep and clear connections, and have a chance to feel heard by and to hear their classmates and their professor. Some comments in the final survey I administered included these:

> I definitely did think about the responses on the board when I was not on line. The responses often gave me an understanding of a different point of view, and whether I agreed or not, I enjoyed the freedom to disagree with someone on line. Most often, I would not do that in a classroom setting.
>
> [The discussion board] made me feel like I count and that if people are interested enough to read my post and answer it, it could mean that I am saying something interesting. It

made me feel good about myself.

There were times when certain things happened and I would find myself saying "oh, this is what such and such was talking about."

Taking an online class allows you to read the posts and come back later in the day after reading and thinking them through. It gives you more freedom in your responses and how you debate your classmates.

By following the discussion board postings of several students throughout the course, I'm using technology to learn about learning and teaching with technology. I'm not just struggling to meet the demands on time and mental energy made by teaching the course in a new way, I'm studying carefully and sharing with colleagues exactly what goes on in the course as I try to meet these demands.

Because discussion board postings take place online in writing, I can preserve and analyze what happens in the "classroom" (which crosses time and space in a way that's especially appropriate to a course on science fiction). Because I have this persistent visible evidence of student learning, I can make my research and my teaching available for comments, suggestions and feedback from my colleagues in and out of the Visible Knowledge Project. VKP provides the training in how to conduct this research and the community with whom to share and further develop the results of the research.

Teaching with technology can consume time and space necessary for the scholarship of teaching, but it can also preserve that time and space. My work with my VKP project has shown me that there is a way for the "happy family" of teaching and scholarship to live together peacefully and with good results for lions and lambs alike.

Note:

For more information, the Visible Knowledge Project website (including the electronic posters of Project participants) is online at *http://crossroads.georgetown.edu/vkp/*

Tell Me A Story

Cynthia Karasek
Speech, Communications, and Theater Arts

TV BOOTCAMP was the brainchild of Warren Lustig, an award-winning editor and producer as well as a former cameraman for CBS news. With more than twenty years experience on the premier news programs, *60 Minutes* and *60 Minutes II*, not to mention thirteen personal Emmy Awards on his shelf, Mr. Lustig wanted to develop a program that would help students at CUNY, his alma mater. To this end, he teamed up with Michael Arena, who is both a fellow-alumnus with a Pulitzer Prize in journalism to his credit and CUNY's Director of Media Relations. Together, the two designed an intensive two-week program to give talented students the chance to work as professional broadcast journalists. Under Mr. Lustig's leadership, these students would experience the same working conditions, demands, and deadlines as those faced by the seasoned news teams at CBS *60 Minutes*.

Three CUNY campuses were invited to send a team of three students and a faculty advisor to BOOTCAMP. The schedule was rigorous. Each team had two weeks to produce a magazine style news segment in the format of CBS *60 Minutes*. During the days we would shoot, screen, edit, transcribe, and write; in the evenings, we would join Mr. Lustig for dinner at the CUNY studios, above the CBS studios, to assess the day's work. This would be followed by seminars on reporting, editing, producing, and shooting, given by veteran newsmen at *60 Minutes II*.

After learning about the BOOTCAMP, Dr. Sadie Bragg arranged for a team from BMCC to attend only days before the program began. With little time to waste, and none for pre-production, we assembled a team of students with strong video experience and brainstormed for a story. When the students settled upon 9/11 and its effects on the garment industry in Chinatown, I asked for permission to add a fourth student to our team who could report in and translate Chinese.

The BMCC team included

Miguel Bernard, Corporate Cable Communications, producer
David Gallardo, Corporate Cable Communications, cameraman, editor
Fatima Boone, Corporate Cable Communications, reporter
Katharine Sung, Multimedia Programming & Design specializing in Video Production, reporter, translator

Our first assignment was to show up on Monday morning prepared to pitch a treatment of our story to Mr. Lustig, Mr. Arena, and the other students. Mr. Lustig turned out to be a most benevolent and humorous drill sergeant. During the blurry, work filled days that followed, he would teach, cajole, prod, and push our students to do the best work they had ever done. He would also amuse them with a showman's sense of humor and nurture them with endless e-mail and late-night phone calls. He quickly became "Warren" to the campers.

Lustig opened the program with the cardinal rules he had learned from the legendary founder and producer of *60 Minutes*, Don Hewitt, and from his own experience:

1. Tell me a story.
2. Tell the truth.
3. Find the spine of the story quickly and stay with it. Maintain the central theme of the story to the end.
4. The public cares about people and what happens to them. Find "characters" that will interest the audience, and let those characters carry the story.

Our next deadline was to produce a "radio cut" by Friday evening. A common practice in electronic newsgathering, writing a radio cut is not usually required in our CCC program. It is a

word-by-word script of the story including the reporter's intro, all voice-overs, and transcriptions of every word spoken on videotaped interviews. To produce a successful radio cut, the reporter must complete the interviews, fully form the content of the story, and do all the writing for the segment.

The pace of the work during the first week was frantic, but the students responded with excellent judgment and common sense. They called upon members of the faculty and administration to obtain contacts for interviews. The team worked the phones constantly to set up interviews and began shooting at the same time. They solicited help from fellow members of the digital video club. By the end of the week, two other CCC students, Christian Moran and Fausto Elias Wilson, were pitching in with the shooting and helping in the lab. When contacts from phone calls began to dry up, they took to the streets of Chinatown to get interviews with small business owners. Fortunately, our students are technically well prepared for this work. Everyone on the team had solid basic skills in video production.

The hardest part of the assignment for our team was holding onto a central story line as the reporting unfolded, and the content of the project shifted and grew with each new interview. Community activists were eager to speak on camera and were especially proud of a public demonstration they had organized several weeks earlier. Several experts were able to describe the impact of 9/11 on Chinatown. We discovered that FEMA had established Canal Street as the northern boundary of the relief zone, excluding 75% of the Chinese garment factories from aid. But we needed to tape the accounts and faces of ordinary people who had suffered directly from economic hardships, and those people were very reluctant to speak on camera. We began to understand that this reluctance was actually a part of our story because it was a cultural barrier that inhibited victims from obtaining the relief that FEMA and private agencies were putting into place and prevented the community from complaining about inequities in distribution of aid. It also prohibited our reporters from getting authentic first-hand reports of the suffering that was evident throughout Chinatown. Many residents were very angry about the way they had been treated by FEMA or the Red Cross, and they would speak at length in Chinese to our bilingual reporter but were not comfortable going on camera. And the story was bigger than the fate of the garment workers; the lack of tourism and business trade in the restaurants had devastated shops and small businesses everywhere in this small community. Our treatment was getting lost in a broader, more diffuse, study of the sociology and economics of an immigrant community under financial stress.

By Friday of the first week there was a sense of mounting anxiety in our bureau. We had shot about twenty hours of interviews covering many aspects of the situation in Chinatown. We had lots of facts and opinions on tape, but we did not have a compelling narrative line that connected the dots; we did not have a Story. Our radio cut was due by 7:00 PM and we were still shooting and screening footage, hoping that a gravitational force would take hold of all of the fragments and begin to pull them back into the central theme of the original treatment. Fatima, Miguel, and Katharine returned from shooting in mid-afternoon with good news: they had finally managed to get on-camera interviews with several unemployed women from the garment factories who were sympathetic characters. We had a chance to return to the theme of the unemployed garment workers, but this footage needed to be screened, and translated, and transcribed, before we could see if we had the content needed to make an integrated script. We also had to reorganize the script outline, fit the best pieces of the puzzle together, write all the transitions, and last but not least provide a new introduction.

The students were encountering the central challenges that electronic news reporters face: How do you get the footage you need to tell the story AND how do you adjust the structure of the story you have uncovered to utilize the footage that you have shot? Experienced reporters and producers learn to manage this dialectic between chasing down the facts of a story while synthesizing the story, by writing and rewriting the story outline based upon the facts as uncovered. The CBS *60 Minutes* format encourages reporters to write extensive voice-over to structure the story and

add order and clarity to the images and interviews captured on video. This technique requires solid writing skills, the experience to distill hundreds of fragments into a cohesive narrative line, and the ability to organize approximately 10 pages of script in one afternoon. Our students were learning this lesson the hard way, but they were not alone. All three BOOTCAMP teams had hit the wall on the radio cut. Warren extended the deadline to Sunday night.

With our first big deadline behind us, our weary team developed better traction during the second week. We focussed on shooting the footage we needed to fill in gaps in the story. We worked on the script relentlessly, trying to explain the relationships between the garment workers, the restaurants, the shops, the problems with FEMA, and the unique cultural attitudes of Chinese Americans. The talent, experience, and dedication of our team became apparent as the students scheduled and executed all the tasks that are required to assemble a finished product. David finished a rough cut and sent the crew back to Chinatown to get more footage for a final cut. Fatima and Miguel went to CBS to shoot the studio intro for the segment and meet with the art department. They recorded the voice-over translations and re-shot and re-recorded Fatima's voice-overs and stand-ups. By Thursday, we were feeling the affects of fatigue combined with the anticipation of our final deadline, the screening, on the following day. No team had seen the work of the other teams, so there was a sense of pride and school spirit driving the students to show their very best work when the segments were evaluated side by side in the CBS screening room. The final cut was finished by midnight, but David, Miguel and Fausto worked on the mix-down until 4 am.

Adrenaline had erased any signs of sleep deprivation when our team arrived at CBS the next morning. For television journalists the screening is the moment of truth that brings sweat to the palms of seasoned professionals. A senior producer can decide (in ten minutes) to air, kill, or redirect a story that has absorbed a news team for weeks or months. Warren had arranged to have the segments screened by Jeff Fager, the Senior Producer of *60 Minutes II*, along with his script editor, and fact checker (who responds to issues of accuracy and legal liability). After previewing the segments with the editor from each team, Warren set up the screening schedule with our team in the third slot.

We listened and watched while two excellent segments were presented by the other teams. Mr. Fager's ability to discern the structure, strengths, and weakness of a segment in a single viewing was impressive. He praised and critiqued every aspect of the segments including content, technical problems, structural decisions, accuracy, clarity, and audience response. His response to our segment, "Lost in the Shadows," was enthusiastic. He praised the students for a "well layered" piece, perceiving their efforts to weave together the many aspects of this complex story into a coherent picture of the situation in Chinatown. He noted that the piece had captured the rich texture of the community and praised our decision to end the piece with a sequence showing the unemployed garment workers taking classes to learn English. It was clear to us from his tone and comments that he recognized the achievement of our team. His few suggestions were constructive and mirrored some of the points we had discussed among ourselves.

Following a luncheon and informal graduation ceremony where the students showed their gratitude to Warren Lustig, we walked to a nearby park where we held the first of several decompression sessions and reflected upon surviving BOOTCAMP. The students had a rich and deep learning experience. The pressure of working under strict deadlines, combined with very high expectations and the subtle competition among the three teams had tested them on every level. They grasped the value of discipline, organization, good craftsmanship, and professional cooperation.

It became clear to the students that the imprimatur of professional work lay in the consistent excellence of each of the many elements that comprise the complicated process of creating a feature-length news segment. Shooting video is an exercise in managing limited opportunity; often there is not a second chance to get an interview or meaningful image on tape. Every shot must be well lighted, every interview must have good sound quality, every voice over must be clearly written, and every editing decision must move the story forward with style and grace. On a large

budget feature film, the director may quip "we'll fix it in post (production)," but with only ten days to shoot and edit a news feature, there is little chance to cover mistakes caused by poor craftsmanship or sloppy planning. Their finished segment was the sum of hundreds of small decisions and judgments made by a number of people over several weeks but the quality of each and every choice was evident in their product.

The students reported that they had benefited from the evening seminars. Tom Armstrong, a producer, had talked about the importance of assembling a good team, and of building trust with his reporter, camera crew, and editor. Cameraman Mike Hernandez had given a succinct lesson on lighting and talked about the importance of capturing the action under pressure. Reporter Bob Simon had recounted his experience of being captured and held in captivity by Saddam Hussein during the Gulf War. Warren Lustig had shared the "dos and don'ts" of professional editing. The students had been highly attentive during these sessions, sensing the weight of accomplishment that these speakers brought to their topics. But several of the students observed that they were not getting new content from these seminars; instead they were recognizing the importance and authenticity of the lessons they had learned in their classes at BMCC.

CALL FOR PAPERS

Inquirer is a journal devoted to teaching and learning at BMCC. We welcome manuscripts on any number of topics, among them the following:

- successful or provocative classroom activities
- themes or units in your teaching
- use of technology or a new pedagogy
- ways you enliven the classroom
- the impact of syllabus or curriculum changes in the classroom
- writing or speaking across the curriculum in your classroom
- classroom-based research you've done
- balancing the curriculum issues: race, ethnicity, gender, age
- teaching problems you've faced and resolved
- assessment and evaluation of students or of teachers
- the impact of policies on teaching and learning
- other topics relevant to teaching and learning

Please submit a proposal for your article (a paragraph or two on one page) to the editors by June 30, 2003.

Submit a paper copy of your completed computer-generated *Inquirer* article by September 1, 2003.

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