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Introduction

The Middle States review is in the air. Some of us are thinking about it a great deal, and to some extent, we all are. Our preparatory self-study is, of course, not a bad thing. It provides a wonderful opportunity to think carefully about what we do here at BMCC, and more importantly, to think about how we do it and why. It is only fitting, then, that we should have such a rich and diverse set of contributions to this new volume of *Inquirer*. In keeping with the spirit of self-study, the articles are organized nearly alphabetically by department, straying from the rule only where thematic connections seem to warrant it.

Yanni Tournas and Eleni Germanou of the Business Management Department present an "analytical framework" to help students achieve "deep learning" that draws together the seemingly divergent bodies of knowledge encountered by the typical undergraduate major. The article by Revital Kaiser of the Computer Information Systems Department offers a helpful overview and discussion of a student learning experience in the field of interactive design, a fine example of the sort of deep learning itself.

Rochelle Holland of the Counseling Department offers an informative discussion of students' own sense of the causes and significance of academic probation. Karla Odenwald of the Developmental Skills Department also addresses student perceptions, in this instance, their struggle to perceive the real connections between their lives and the sorts of questions they face on the ACT exam. From the English Department, Dolores DeLuise also expresses a clear sensitivity to student perceptions, specifically their experience of language.

Robert Farrell, our Information Literacy Librarian, brings to the table a thorough and subtle discussion of library resources that faculty can use to enhance their courses and, at the same time, promote student information literacy. Helen Mele Robinson of the Teacher Education Department picks up the same theme with some practical reflection on her own efforts to teach information literacy through the content of an education course.

From the Mathematics Department, we have contributions by Jenna Hirsch and Leonid Khazanov. Hirsch offers an illuminating reflection on the mathematics of tipping, and as good an example as there is of the real-world relevance of numeracy. Khazanov's piece highlights the frequently overlooked didactic skills of students, and more generally reminds us of the unpredictable side of teaching and the need for pedagogical flexibility in the real-world classroom. These articles, like those of Tournas and Germanou and Kaiser, share the common theme of how to prepare students adequately for the real-world personal and professional lives they must lead. Simon Carr of the Music and Art Department offers a persuasive argument that any concern with the real world, mathematical or otherwise, might find its best foundation in the effective "mix of hand and mind" that is intrinsic to learning how to draw.

Bramadeo Dewprashad of the Science Department effectively elevates community-based student research to a pedagogical imperative in science education, and by extension recommends it to as many disciplines as can accommodate it. In a piece jointly authored by Nkechi Agwu, Piotr Bialas, Brahmadeo Dewprashad, Judy Eng, Louise Greene, Monique Jean Louis, and Barbara Tacinelli (Mathematics, Science, and Nursing Departments), student research is again given center stage in a report on the results of a CUNY Community College Collaborative Incentive Research Grant project.

Jack Estes and Rifat Salam, both sociologists and members of the Department of Social Sciences and Human Services, draw our attention to the pedagogical significance of students' immediate experience of the familiar. Estes argues the case for integrating popular culture studies into any class. Salam argues persuasively for the use of student

journaling as a means of student self-examination and a pedagogical tool.

Rhea Parsons, psychology professor and co-coordinator of the Title V advisement initiative, offers a welcome overview of the means and ends of the ongoing effort to draw liberal arts advisement more effectively into the educational experience of our diverse students. Hector Payano of the Modern Languages Department takes up the perennial, if unpopular, topic of discipline.

Alan Wallis of the Modern Languages Department steps helpfully beyond the "time-honored boundaries" of his discipline to discuss the nature and significance of ownership in the virtual world of the internet, and to clarify the relevance of such concerns to working professors. The articles, by Lisa Rose and Roger Foster, both of the Department of Social Sciences and Human Services, provide thoughtful responses to a piece published in the last issue of *Inquirer* that raised serious doubts about the viability and efficacy of online teaching. Foster bases his respectful and thought-provoking reply upon a longstanding philosophical worry about the difference between the written and spoken word. Rose, speaking not only as an online teacher but as Faculty Coordinator for Distance Learning, argues that the now fashionable worry about the "death of teaching" is misplaced for a number of reasons.

We close this issue with the world itself and the question of globalization. The last two papers by Alister Ramírez Márquez and Maria Enrico of the Modern Languages Department and Cynthia Wiseman of the Developmental Skills Department give us three perspectives on the meanings and value of the Salzburg Seminar.

The articles gathered here represent ten departments and the professional experience of fully twenty-six of our esteemed colleagues. Even this brief overview of topics and themes reminds us of how much we do and hints at how well we do it. The texts you are about to read demonstrate beyond any doubt our competence and dedication, our love of teaching, our commitment to lifelong learning, the profound esteem in which we hold our students, and our deep concern for their future success in this rapidly changing world. We hope you will enjoy reading this lucky thirteenth volume of *Inquirer*, and we hope you will feel renewed pride in our remarkable community of teachers and learners as we make our way through the new academic year and beyond.

Mabel Asante

Matthew Ally

An Analytical Framework for Organizing Course Structure and Achieving Student Deep Learning

Yanni Tournas and Eleni Germanou[1]
Business Management

Introduction

One of the most important issues arising in higher education is how to motivate students to understand and grasp the course material presented to them during their study years. An associated issue, related to the understanding of knowledge obtained through the college study, is the ability of college graduates to reproduce and apply this knowledge to real world settings when they become employed for a particular organization. This issue is widely discussed and argued in both academic and popular press because it is associated with the employability and professional career readiness of college graduates. Very often, employers complain about the professional career readiness of college graduates and the corresponding inadequate college preparation for them to be effective decision makers and to tackle real world problems. The issue in this debate is how to ensure that the academic preparation of individuals entering the work force provides them with adequate skills to undertake productive careers after graduation and to be able to deal effectively with a variety of real world problems. Such skills are highly valued by employers and allow college graduates to establish successful careers in a variety of disciplines.

In pursuing this objective, students in higher education institutions today are exposed to many different streams of information intended to provide them with the necessary backgrounds to tackle real world situations in a variety of organizations and industries. However, the study of various subjects in a variety of disciplines that provide separate streams of knowledge can be overwhelming and possibly result in students not being able to connect the different streams of information and, consequently, not being effective real world problem solvers and productive employees.

Every person has his or her own individual way of gathering and processing information, which means ways of learning and solving problems in day-to-day situations. These personal cognitive abilities, acquired in the course of a long socialization process, are called ''learning styles'' (Reynolds, 1997). A learning style can be defined as the individual, natural and preferred way of a person to treat information and feelings in a certain (learning) situation which will influence his/her decisions and behaviors.

Several authors [see Biggs, 1987, 1996; Boud, 1990, 1995; Gibbs, 1994; Entwistle and Ramsden, 1991] have investigated student attitudes to learning extensively. Different student attitudes have been identified and can be broadly categorized according to the following three approaches: (a) Deep Approach: associated with the student's intention to understand, vigorous interaction with content, relating concepts to every day experience, examining the logic of the argument. Therefore, a student taking the deep approach would develop an intrinsic motivation in the subject matter and obtain a meaningful understanding of what is learned; (b) Surface Approach: associated with the student's intention to complete task requirements, memorizing information needed for assessments, failure to distinguish principles from examples, focus on diverse elements without integration. A student following the Surface Approach does not derive an intrinsic meaning from her study of the subject matter, and (c) Strategic Approach: associated with the student's intention to obtain the highest possible grades, use of previous examination papers to predict questions, and being alert to cues about grading schemes. A student un-

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dertaking a strategic approach to studying would be focusing on high grades and the best strategy to attain them without necessarily having an intrinsic interest in the subject matter. Each of these approaches is associated with different student learning outcomes and the most desirable outcome among them is the Deep Approach, since it corresponds to better understanding of the subject matter and the students being able to relate and apply its concepts to every day experience and real world issues (Marton and Saljo, 1976).

Among the potential explanations for students subscribing to the Surface Approach or the Strategic Approach to learning is that the material presented to them can be volumes of disparate types of information, not necessarily integrated in a unifying and understandable framework. To facilitate student assimilation of the course material and knowledge, various authors (Crooks, 1988; Entwistle, Hanley and Hounsel, 1979) have examined and proposed a variety of methods and devices to motivate students to effectively understand and absorb the issues related to the subject studied in each particular class (not least student assessment and evaluation).

The aim of this article is to propose an analytical framework for assisting educators to plan the course structure so as to facilitate student deep learning approach.
The specific objectives of the study are to:

1. help students during their academic experience to develop a critical understanding and thinking and to sharpen their analytical skills and abilities.
2. organize student knowledge and assimilation of new information in such a way that they can apply it to a variety of real world settings and consequently raise their employability perspectives and professional career readiness after college graduation.

We argue in this paper that one of the potential reasons for the student minimum effort is that sometimes the volume of information exceeds the individual's capability of absorbing this information, unless there is some organized way to think and absorb this information (sometimes referred to in the literature as bounded rationality). Therefore, there is an identifiable need to present to students a general analytical framework which can assist them to categorize the newly acquired knowledge and absorb it easily when they are able to relate it to the proposed analytical framework.

This classroom information acquisition is very important for the society as a whole because college graduates are expected to reproduce and utilize the college acquired information in order to apply it in real world settings. Effectively, college students are expected to become decision makers when they enter the workforce, basing their decision on a critical analysis of the body of knowledge they acquired during their academic experience. The approach we present in this paper is complementary to the previously discussed student motivation approaches, and we propose a course structure based on the framework according to which new information about different subjects is presented to the students.

The Analytical Framework of Course Structure

Kolb (1984, p. 38) defines learning as ''the process whereby knowledge is created through the transformation of experience.'' Another definition, very similar to that one, is focused on the process. Learning is defined broadly as that set of processes by which new elements of action-orientation are acquired by the actor: new cognitive orientations, new values, new objects, and new expressive interests.

Biggs (1985) describes a model of student learning processes which is outlined in Fig. 1. This model consists of three distinct stages; presage, process, and product, which had been put forward earlier by Dunkin and Biddle (1974). Biggs's model suggests that the quality of student learning (the product) is induced by their approach to learning. Their approach to learning (the process of learning) is affected by students' perceptions of the requirements of the learning task which are, in turn, influenced by their personal

educational characteristics (general orientation to learning) and their perceptions of the learning environment (teaching style, teaching methods, course material/design, and course assessment).

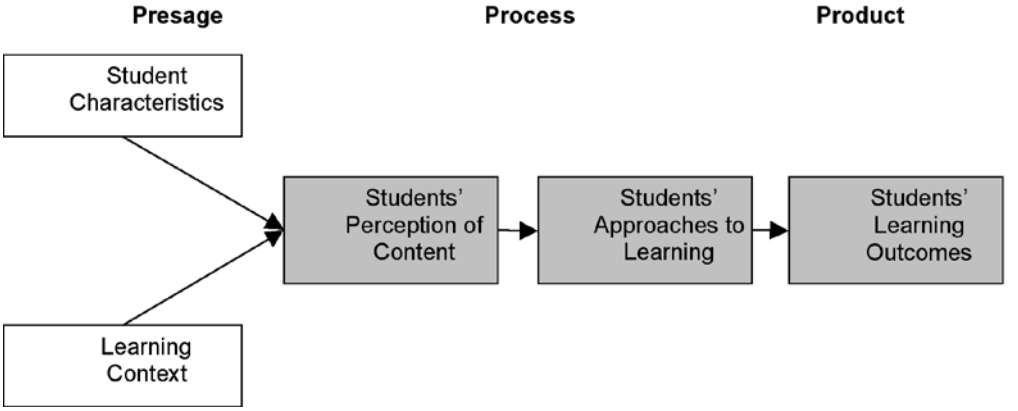

Fig. 1. 3Ps model. Source: Biggs (1985, p. 185).

The Analytical Framework

In particular, we propose an analytical framework for course structure that fits in the presage stage of Biggs' model. Specifically, our framework focuses on learning context and redesigning the course structure so that it helps students to relate the course material to real world issues. This analytical framework is very helpful for dealing with most of the real world problems in a very general way and it applies to a variety of disciplines. The real world issues to be addressed have to be clearly established at the beginning of the course, then utilizing the proposed analytical framework, emphasize to students that new information presented during the course will be associated with one of the elements of this analytical framework. Therefore, by adopting changes in the learning context according to this framework we induce changes in student perceptions and may create differences in their attitude towards learning.

This framework is utilized extensively by decision makers in real world settings. For each course, there is a specific class material to be covered that is associated with the subject matter. Our framework is established at the beginning of the class and we explicitly tell our students that any information presented in this class fits in one of the elements of the framework that is associated with attaining optimal solutions in the subject matter presented to them. It consists of the following elements of an optimization model:

- Specifying your objective (goal)
- Identifying the action choices (decision variables)
- Identifying the set of constraints restricting the options for achieving the objective
- Evaluating alternatives

Specifying Your Objective (Goal)

At the outset of each course, the objectives to be pursued in relationship to the real world issues or topics to be studied should be explicitly outlined. Economic research (Thomson, 1996) dictates that in every real world issue/problem, the identification and specification of the objective is of utmost importance. It is usually associated with attaining the optimal state of the presumed problem. In most real world problems, the optimal

state is usually associated with maximizing the welfare of society or individuals or organizations/entities. Being explicit about the objectives helps students clarify the issues associated with a particular problem.

In the business disciplines, this issue is usually associated with attaining the objective of the individual firm. In most cases, the business' objective is defined as profit maximization or cost minimization, especially in business disciplines, since the firm's objective is usually denominated in ordinal units of measurement (i.e., dollar terms or euro terms), it is easily measured and it provides for establishing benchmarks for setting up the optimization problem. This method is followed in attaining a firm's profit maximization or cost minimization that can be verified by using standard accounting techniques. Similarly, individuals (consumers) are assumed to have the objective of maximizing their satisfaction.

Identifying the Action Choices (Decision Variables)

After setting the objective for the issues to be studied during the course of a class, alternative courses of action have to be identified in pursuit of attaining the previously stated objectives. Students should be able to see explicitly the connection between the class material and the alternative courses of action. The different courses of actions usually correspond to choosing specific values for the decision variables that determine the end value of the objective under consideration.

Again, in business disciplines, in the case of firms or consumers, the important decision variables are easily identified. In the case of firms attempting to maximize their profit, the decision variables to be considered are in most cases deciding about which price to set and what quantity to produce. By setting appropriate prices and quantities to be sold, the objective of profit maximization can be attained by examining alternative price and quantity combinations. In the case of individuals (consumers), they have to choose which goods and services to consume in their effort to maximize their satisfaction.

Identifying the Set of Constraints Restricting the Options for Achieving the Objective

Students must be aware that an important consideration for attaining the optimal solution for each problem is the presence of constraints. Therefore, class material should explain how, in pursuing a specific objective, constraints limit the choice of actions that are available to the decision makers. They can be associated with a wide variety of issues and the exact specification of constraints depends on the type of real world problem decision makers face.

In the business disciplines, in the case of firms or organizations, constraints are usually associated with issues related to demand conditions, cost conditions, resources and available technology. In the case of individual consumers, they are associated with their own budget constraint (i.e., how many financial resources consumers have so as to buy appropriate bundles of goods and services in order to maximize their satisfaction).

Evaluating Alternatives

Last, in the class presentations, it is important to explain to students that it is not enough to identify each course of action. We also need to perform an analysis of the corresponding costs and benefits of each action. By performing a cost versus benefit analysis of actions we can choose the best course of action, given the real world issue studied. In most real world problems, the choice of the appropriate course of action, taking into consideration the existing constraints to attain certain objectives, is usually associated with a cost versus benefit analysis of each course of action. Decision makers have to explicitly consider the costs of each action versus the corresponding expected benefit of

each action in the way of attaining pre-specified objectives. For the business disciplines, this choosing of different price has a different impact on cost and revenues and therefore profits, whereas consumers do the same cost versus benefit analysis when deciding which different goods and services to buy.

We can easily see how the above proposed analytical framework can be utilized in different disciplines. For example, consider an individual in need of medical or nursing care. The objective of the decision makers will be to cure and restore the prior health condition of a particular patient. To attain that objective, different courses of action or therapies must be undertaken with respect to medicine, hospital care etc. There are also numerous constraints that need to be considered and that will have an effect on the appropriate course of action chosen. Those constraints include age of the patient, prior health condition, allergies etc. Last, to choose which course of action to implement, a cost versus benefit analysis has to be conducted, for example, which are the side effects of the various treatments versus the expected improvement, and financial considerations, etc.

Developing Student Skills

Using this analytical framework to motivate class presentations is very important in several respects. Student learning is greatly facilitated and students are more likely to adopt the deep approach to learning, since they are able to connect all the information presented to them and therefore it becomes easier to remember and understand. Moreover, as students are presented with new information, they are able to absorb and understand where new information fits in the established analytical framework. Students are able to understand the importance of attaining the objective in the best possible way, helping them understand what is important and what is less important in the real world issues studied and therefore being explicit with the objectives, choice of actions and constraints considered for each particular issue.

By incorporating existing or newly acquired knowledge in the context of this framework, students not only assimilate the new information easily but they also receive the necessary training to become effective decision makers. By being able to understand the real world issues and provide solutions, this framework can contribute towards addressing issues of employability and professional career readiness of college graduates. A complaint often heard by today's employers is that college graduates are not qualified as independent thinkers and problem-solvers. Having an organized way of modeling, thinking and providing solutions for a particular real-world problem provides employees with a competitive advantage for maintaining their employment and for enhancing their professional growth.

Concluding Remarks

We strongly believe knowledge presented to students in such a way that can enhance the relevance of higher education to real life. It also helps them to sharpen their analytical skills and makes it easier to motivate them and absorb the new class material in an efficient way. This greatly assists them with potential employment interviews and improves their employability and prospects for successful careers in a variety of fields.

We have applied this analytical framework for many years of our respective higher education teaching experience, and we think that it is very effective in classifying new information and sharpening student analytical skills. Our teaching experience is mainly in the field of business and economics, but the analytical framework we propose here can be very well extended to most other disciplines providing significant gains in student analytical skills.

Of course further discussion and elaboration about the specifics of the analytical

framework details are necessary when applied to different real world problems. One could think of the issue of measuring social welfare and the variety of measures involved. But, as long as a particular measure is established, the analytical framework provides students and decision makers an important way for organizing their thoughts and making rational decisions. Another direction would be to measure and compare student motivation improvements after students become exposed to the above analytical framework.

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The Real-World Interactive Design Assignment

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Computer Information Systems

At the core of any design assignment is a communication problem. In today's screen-based, interactive design environment, visual design, while the most conspicuous part of the project, is often just a small part of the solution.[1] Consider, for example, the recent internship experience of four BMCC multimedia students. Recruited by Multimedia Programming and Design professors Jody Culkin and Revital Kaisar, a team of multimedia majors undertook a web design project for the Health and Hospitals Corporation of the City of New York (HHC) to highlight the corporation's art collection. By working on this seemingly simple assignment, the students learned first hand about the various considerations that factor into the design of a new web site. This team of students practiced the many and shifting roles involved in interaction design in a real-world situation.

HHC has an extensive and little known art collection. This collection, which is displayed in New York City public hospital rooms and lobbies, includes more than five thousand artworks, dating back to the 1930's, and the Works Progress Administration's Federal Art Project (WPA/FAP). It contains works in a wide range of media by both emerging and well-known artists, such as Robert Motherwell and Ansel Adams.[2] Kathleen McGrath, a Senior Director in the HHC Office of Communications & Marketing, envisioned a web site that would showcase the artwork, get the word out to the public about the collection, and encourage donations of art. HHC, however, could not qualify as an internship site for a group of multimedia majors to create this web site, because it lacked personnel knowledgeable in web design, and who could mentor interns on a project of this scale. So, when Revital Kaisar proposed a faculty-mentored internship project, Daisy Alverio, then the chair of the Cooperative Education Department, suggested working with Kathleen. We met with Kathleen and with Gregory Mink, the archivist of the collection, in July 2005 to discuss the particulars of the project and were given an enthusiastic green light to go ahead.

The next stage was to identify the right students for the project. We needed to build a team that would be able to take the project from start to finish with only weekly mentoring sessions. We looked for talented and knowledgeable students who were responsible and good team players. We recruited Giuseppe Dursi, as a programmer, Felix Velez and Yong Ho Cho as designers, and Keston Roberts, who we designated as the project manager. Although we assigned them roles, it was with the understanding that they would all be equally responsible for the successful completion of the project and would all participate in the production stage. As it turned out, they made an excellent team, worked well together, well beyond our expectations, and truly enjoyed each other's company. The project was implemented with the help of Jon Dash, current chair of the Cooperative Education Department. While this was not a typical internship, the students were enrolled in CED 345, the internship course required of all multimedia majors.

If the internship's objective was to expose students to the challenges of a real-world design assignment, this project succeeded, for there were plenty of challenges here. Their first challenge was to come up with a design draft for the site's interface that was beautiful, functional and conformed to the guidelines governing all New York City web sites. Soon these guidelines became even stricter as Kathleen asked the design to fit seamlessly within the current HHC corporate web site, following a restrictive set of visual and accessibility considerations. This severely impeded creative freedom and was somewhat

[1] The Education of an E-Designer:, edited by Steve Heller
[2] "The Medicine of Art: A Retrospective of Public Art in the New York City Health and Hospitals Corporation" 1997

demoralizing to the group as they had hoped for an opportunity to showcase their design skills. Still, it took just as much creativity and hard work to come up with a design solution that was attractive, usable, and fitted comfortably within the current HHC web site.

A different challenge, one that almost threatened the success of the project, was working with the development platform. We had planned to use Dreamweaver and Flash, both taught in MMP classes. Well into the project, however, our client insisted on developing the site on Teamsite, the New York City proprietary site management software. Teamsite would enable future updates of the site without the need to know programming. While this was an excellent reason to use Teamsite, the day-long training that the students received on the software proved insufficient as they ran into problems trying to implement their design in Teamsite. No one in HHC was available to help, and we, the mentoring faculty, were not familiar with the software.

Changing project parameters midway through the project is an undesirable but common occurrence in the life of design professionals. It happens because clients are not good in defining their own needs in the first place. In web design it may cause a ripple effect in which a small change affects all aspects of design. Changing the scope of the project, for example, may require reworking the information architecture, resulting in additional production work. In this case, changing the development platform not only affected programming and production considerations, but also required modifications in the interface design. In order to respond well to these and similar situations, our students needed a good grasp of the entire design process, as well as the ability and motivation to keep learning. Most importantly, it required the skills to navigate the complex human environment comprised of client contacts, team members, supervisors, and in our case, mentoring faculty, and even the invisible target audience of the web site.

In December 2005, the four students were honored in HHC's holiday reception for the press. Relieved and proud, our interns watched as Kathleen presented their work and described them as "focused and mature". It was a happy ending to a rather stressful internship and we were all grateful that it all worked out so well in the end.

Our students succeeded because they displayed the most important traits of successful players in this rapidly changing field. They were flexible problem solvers, self-reliant, and excellent team players. They learned new technologies very quickly and understood the role of their product in the scheme of a much larger project. Each one of them performed not merely as a graphic designer, programmer or project manager, all four collaborated in an environment of loosely defined roles and shared responsibility. Working with our students on this project reaffirmed our commitment to developing curricula aimed at developing an understanding of the complete design process as it operates in the complex real-world environment.

Students' Perceptions of Academic Probation and the Implementation of a Life-Journey Workshop at BMCC

Rochelle Holland
Counseling

Introduction

During spring 2005 semester, I surveyed 93 students on academic probation to explore their perceptions of why they had not met the minimum academic standing. Many of the students reported that social factors impeded their academic performance. There was a common thread of conflict with the students' self reported responses: they had difficulty with multi-tasking, a mixture of responsibilities involving the family, school, and work. I decided to devise an intervention strategy that focused on educating students on the family life cycle and how to cope with various life experiences. I was able to create a student workbook that discussed topics related to BMCC students who were on academic probation or perhaps students who were in need of counseling services. The workbook provides supplemental activity worksheets that students could complete and then meet with the counseling professors at BMCC to discuss their issues. Another purpose of the intervention strategy was to educate students on probation about role expectations for various tasks, including family, work, and school. The intervention was only used as a learning module and was not used to measure how many students were actually able to get off academic probation by participating in this intervention.

Devising the Methodology

When developing the methodology, I thought it would be interesting to have a two-part module that was grounded in assessment and intervention. The initial goal was to probe students regarding their social and/or family responsibilities, by having them complete a survey. The survey comprised open and closed-ended questions that inquired about personal reasons hindering their academic performance. Variables used in the survey were the following: (a) parental status, (b) personal illness, (c) family illness, (d) employment, (e) poor academic preparation, and (f) mental health status. After responses to the survey were gathered, I used a simple percentage calculation to analyze my findings.

My second goal was to implement a workshop that discussed management of multi-tasking while in college. When devising the strategy, I used family system theory and general system theory as the premise of the intervention. The family systems theory states that when one family member changes, the dynamics of the whole family change. General systems theory suggests that the sum of parts equals a whole. Therefore, from a humanistic perspective, when examining an individual college student, one would consider family life, employment responsibilities, job satisfaction, healthy partnership relationships, and educational attainment to be the sum of parts of a person. These theories best relate to community college students on academic probation. Research has shown that many contemporary college students are first in their families to pursue higher education. Thus, there is a social change within the family that creates a new dynamic and perception among family members.

The learning module developed comprises the following topics: (a) An untraditional variation of the family life cycle: involves developmental stages that families encounter over time; (b) Establishing college allies: encourages students to socialize in the college setting with their peers; (c) Intimate relationships and academic concentration: focuses on contemporary family dynamics and issues that arise when a student is multi-tasking while enrolled in college; (d) The world of work and you: discusses the student's role as

an employee and what not to do at work, as well as what to be conscious of; and (e) Reference to the belief system when faced with life's challenges: discusses the perks about having a positive belief system. The workshop was entitled "life journey." Each student received a supplemental activity workbook. At the end of the two-hour workshop, students were given a likert scale to analyze their perceptions of the workshop intervention.

Findings from the Gathered Data

All of the student responses were based on a convenience sample, and during the time of the workshop only 16 students attended. Thus, the findings from this survey can not be generalized to BMCC students on academic probation; it was limited to some students' perception of why they were on academic probation. Sixteen students from diverse backgrounds participated in the study. Thirteen (81%) were female and three (19%) were male. Six of the students reported to be African American (37%), two were Asian (13%), six (37 %) were Hispanic, one (6%) reported to be West Indian, and one (6%) reported to be Hispanic and African American. Thirteen (81%) of the students were single/never married, two (13%) were divorced, and one (6%) was separated. Ten (63%) students reported to be employed; six (38%) were full-time employees and four (25%) were part-time employees. Four (25%) students reported to be parents and nine (56%) students were care-givers to relatives (Holland, 2005).

Part I: Survey Responses

1. Fifteen (94%) students were on academic probation and one (6%) student reported that he/she attended the workshop for personal betterment; however, he/she was previously a probation student. Of the fifteen (94%) students on probation, eight (53%) reported that they attended the workshop for personal betterment as well as for being on academic probation. Seven (47%) of the 15 students reported that they were on academic probation because of poor preparation for course-work.

2. When analyzing the responses of the 15 students on academic probation, five (33%) reported that employment was a factor in their being on probation. Four (27%) students reported that personal illness was a factor; three students (20%) believed that their roles as care-givers caused them to be on academic probation; two students (13%) stated that parenting was a barrier to attending college. Only one student (7%) reported that parenting, care-giving, personal illness, family illness, employment, finances, and poor academic preparation for course-work were barriers to meeting the minimum standards for academic retention. Four students (26%) provided additional reasons for being on academic probation; these included: (a) emotional issues, such as breaking up with a boyfriend, (b) bad choices, for instance, scheduling or taking too many difficult classes at one time, (c) problems with the teachers, and (d) problems with managing social life and school work.

3. Thirteen (81%) of the 15 students reported having mental health issues; out of the 13, five (38%) students reported to have experienced depression; five (38%) reported stress was an issue for them; one (8%) reported having anxiety disorder; and two (16%) reported having an attention deficit disorder. Out of the 13 students, five (38%) reported multiple mental health issues. Most importantly, students were asked if they ever participated in individual counseling services regarding their mental health crises; only three of the 13 (23%) reported to have participated in therapeutic intervention; and one (8%) of the three students reported to have used the services for a few days; another student (8%) reported to have attended counseling for three to five months, and one (8%) reported to have attended counseling for six months or more. Unfortu-

nately, ten (76%) of the 13 students reported that they never attended any therapeutic intervention, although they had encountered some forms of mental health distress (Holland, 2005, pp. 12-13).

Part II: Life-Journey Workshop Responses
The likert scale results indicated that sixteen students (100%) agreed that their knowledge increased; 15 students (94%) agreed that they were motivated to learn about the family life cycle; 15 students (94%) agreed that they could apply the information to their personal situations; 15 (94%) students agreed that they felt empowered after attending the workshop; last, all agreed (100%) that they would share what they learned with others (Holland, 2005, p. 14).

Discussion
The survey showed that some BMCC students are aware of how social crises influence their ability to perform well academically, and the likert scale responses indicated that the students were interested in learning about the family life cycle. There are many social factors that create barriers to academic retention for college students. Research in the field suggests that social and family problems hinder educational attainment, which can also go beyond racial and cultural lines (Biyik, Kiziltas, Turkim, & Yemencil, 2005; Bolden, Durodoye, & Harris, 2000). The students at BMCC reported that they needed additional help with managing social skills. In conversations with some of the students, I learned that they worked full-time jobs while attending college with the hope of rushing the creative learning process that college offers. Many felt that their age was a barrier to the personal and career goals they had set for themselves. These students' perceptions confirmed findings of previous research, which argues that many community college students attend college for better financial opportunities for their families (Purnell & Blank, 2004; Hodge, 2001).

Conclusion
The survey was a building block for understanding how students perceive their situations and how to better retain students who demonstrate difficulty with attaining higher education goals. The life-journey workshop benefited the students for a number of reasons. They learned different ways of managing family life, intimate relationships, and employment while enrolled in college. Also, they became more aware of the similarity of their issues. Learning these strategies can assist them with being more cognizant of their multitasking roles as well as empower them to set realistic goals for the family and educational attainment. It is my belief that when students are educated on role expectations, they will better manage their multiple responsibilities and, hopefully, earn better grades as a result of having an increased level of concentration while learning (of course this is only one aspect for assisting with earning better grades). This concept may sound very logical; however, when someone is experiencing chaos from being overwhelmed by various role demands, it can be very difficult to make logical and/or organized decisions. Many of the students based their educational attainment practices on traditional ways of attending college; however, this may not be productive for them if they have more responsibilities than other students who do not have a similar life style.

Other institutions of higher education also implement the family life strategy. In the spring 2006 semester, I had the opportunity to present a paper at Brigham Young University, where I learned that students there are required to take a course in family development before graduating, so they can better manage family life. Last, this intervention is one of the many strategies that counselors at BMCC implement to assist with retaining students.

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Building Neighborhoods

Karla Odenwald
Developmental Skills

BMCC students are not just young people who happen to be enrolled in a community college in Manhattan. They are the new faces of urban culture in New York City, and as such, they need to take their place in the world as young adults who are engaged in their communities. They are not just thrust out into the world, as tuition-paying disembodied spirits, soon to be replaced by the next group of young people, and so on, and so on, but are part of the world. And here is where some students tend to experience a certain disconnect, which is disproportionately manifested when they are confronted with the ACT writing exam: they mistakenly believe that the issues they are asked to examine and analyze have no relevance to their lives.

The ACT basically contains two types of questions. These are issues regarding the community and issues regarding school. And though these types of questions may seem pretty straightforward and uncomplicated to instructors, ESL students often do not see themselves as sufficiently part of their school or community to be able to comfortably identify or make an adequate evaluation of the services these offer. So they spend an inordinate amount of time thinking about what to write. In effect they freeze, shut down; they go blank–overwhelmed by the task looming before them.

BMCC serves not only first generation immigrants, but those who are known as *"generation 1.5."* These students are the children of first generation immigrants, and once upon a time, they would have been known as second generation Americans. Once upon a time, the sacrifices their parents made working at minimum wage jobs would have ensured that these young people had an opportunity for a better life, that many could spend their school years focused on school—even if they worked a few hours on the side, and then go on to become professionals. But this is no longer the case. Today many *generation 1.5* students are holding down the same types of jobs their parents did, with the same long hours, and hectic schedules. It is not uncommon for BMCC students to work more than thirty hours a week. Academic skills begin to suffer, and then school is seen as intruding upon "life"—which becomes synonymous with work. It is unfortunate, but nonetheless true that the demands of work—often at very low paying jobs—and family responsibilities (caring for children or younger siblings) often cause students to place less importance on the work they're doing in college—especially if it seems to them that there is little relationship between school and life. But they have been told that a college degree is a prerequisite for success—and so they hang on.

The problem is that this "hanging on" is often experienced in a passive manner, a sort of alienation, a feeling of exclusion, a disengagement from that unreal world where there are timed one-hour ACT writing exams with topics that are "boring" and "no one ever thinks about." The academic world is presented to these students as sometimes baffling and sometimes hostile, made up of a series of rules which may not make much sense, and this makes it difficult for them to navigate school successfully. They experience rules as something to keep them from getting ahead, and the ACT writing exam is seen as one of the greatest culprits–there to make sure ESL students never graduate.

In my classes, I explain to students that the ACT is not as mysterious and unapproachable as it seems, but that it is necessary for them to be more proactive about preparing for the exam. Students need to learn strategies to help them approach questions actively, anticipating what they will be asked. They need to understand that the world is not simply "out there," divorced from the reality of their day-to-day lives. Social institutions are put into place for a variety of reasons; they are constructed by people and for people. And responsible citizens and residents concern themselves with what goes on in their communities, and they participate in these to varying degrees.

To make students more aware of the relevance of community services, I have developed an exercise in which students form teams and build neighborhoods, justifying the different services that will be available to residents. This process helps them think more critically about their surroundings and helps them come up with ideas for their ACT exam. It is imperative that students take an active, not a passive stance towards the exam, that they be familiar with the structure, anticipate the possible content, and be comfortable enough with methods of argumentation so they can increase their chances of passing.

This exercise takes about three hours, so for courses that only meet one hour and forty minutes per session, two-class periods are needed. There are five basic steps in the process, but the exercise can always be built upon, by focusing on specific aspects at greater length. Instructors may want to add a step or two of their own or modify the ones outlined below in whatever way best fits their students' needs.

Part I

We start our neighborhood building exercise with a fifteen minute brainstorming session. I write the following on the board:

> You are planning to move with your family and you are looking for an ideal neighborhood—one with all the amenities to make your lives comfortable.
> 1. Make a list of all the amenities you want your new neighborhood to contain.
> 2. For each of these, write a reason stating why you chose it.

Students work in groups of about five, brainstorming together, and each group chooses a secretary to record the group's answers. Coming up with the list doesn't pose any problems. The reasons take a little longer. Some groups come up with phrases like, "to watch kids" for a daycare center, instead of writing a complete sentence. That's fine because this is simply the brainstorming stage. After the fifteen minutes are up, students volunteer some items from their lists and I write them up on the board. The new list might look something like this:

hospital	mall	supermarket
park	library	high school
elementary school	daycare center	police station

I don't ask them for their reasons. It's important for students to see that the process of brainstorming is good in itself; every thought does not have to result in a concrete product.

Part II

I write the following on the board:

> The government has just approved one million dollars to open up a new amenity in your neighborhood. With your group you're going to lobby for one of the places on the board. Since only one group will get the money, you have to be very persuasive and show how your choice is more beneficial to the community than any other.

I then go through the different options up on the board and groups volunteer on a first come, first serve basis. Now each group is responsible for backing up one project. In order to help students get organized, I write a few guiding questions on the board:

> Who does it serve?
> What is it for?
> When/how often is it used?

And then a few questions which are more support-oriented to help them develop their argument:

Why?
How?
So what?

And ultimately:

Prove it.

As an example, I take one of the possibilities left on the board which no group has chosen. Let's take the mall, for instance. We go through the two levels of questioning together.

1

Who does it serve?	- Customers/workers
What is it for?	- Make shopping easier
When/How often is it used?	- Mostly after work and on weekends

2

How does a mall serve workers?	- It gives people in the community jobs.
Why is this important?	- Because it decreases unemployment
So what?	- So people who are working can provide a better life for their families.
How?	- By making sure they have adequate food, clothing, shelter, etc.
Prove it.	- (In my neighborhood people have a hard time making ends meet because jobs are so scarce…)

I explain to students that the questions do not follow any particular order. The important thing is that these questions are being asked in order to analyze why something is important, and students can back up their claims with specific examples from their own lives, or from the lives of people they know. I tell them that while it's okay to start with "me", they can then shift to "others like me" and further—to "others who are different from me". The purpose of this particular part of the exercise is to discourage students from reducing argumentation to a set of opinions about the world based simply upon their own experience. Developing critical thinking skills requires looking beyond oneself to others, and questioning oneself—not just others.

Students are told that they will have about twenty to twenty-five minutes to prepare their argument. During this time they can brainstorm, take notes, outline a basic defense—whatever they're comfortable with. The only thing they cannot do is write a paragraph and then read it in front of the class. They will then have five minutes to present their position to their classmates orally, and another five minutes to answer questions, or refute counterarguments made by their classmates. All members of the group should speak, not just one or two.

Part III

After each group makes their initial presentation, I indicate to the rest of the class that they should ask questions, or find something to "attack". If no questions or comments are forthcoming, I offer a couple of my own, and that usually encourages others to start speaking up.

It is interesting to note that students usually have an easier time answering questions and defending their position than making the initial presentation. Engaging in dialogue helps them not just loosen up a bit, but also makes the issue being discussed more real. By having to justify the service the group has chosen, the students develop, at least temporarily, the sense of ownership of their position, through the responsibility of having to back it up. It is something they have chosen, and this makes their ideas flow more freely.

It is important to make students aware of the fact that we are constantly engaged in dialogue with ourselves as well as with others. We ask ourselves questions; we answer ourselves; we consider alternatives. In effect, we are always in a process of discovering not only ourselves, but the world around us. And amenities such as schools, clinics, day-care centers, places of worship, subways, etc. are part of this world. Students live in the neighborhoods and use the services. If they can understand this, they will be in a much better position to pass their writing exam.

Part IV

After all the groups have presented, I announce that we will be voting for the best proposal by secret ballot. I pass out small blank pieces of paper identical in size and these serve as ballots. I tell students we will be operating on the honor system. Each student will vote for any group except his or her own. When all the ballots are in, one or two volunteers come up to sort and tally up the results.

Part V

For homework students take each of the options that were left over on the board from the initial brainstorming session and write a short paragraph about why each is important, using the questions we examined in class as a guide.

These same steps can also be applied to the other type of ACT questions, focusing on school and the different services it offers. Students can be asked to construct the ideal college and equip it with what they think best: library, computer lab, tutoring center, gym, cafeteria, etc.

This exercise helps students build the habit of asking questions about propositions before accepting or rejecting them. And these questions, in turn, lead to more in-depth analyses, more focus on specific details, which enhance any kind of writing–not just the CUNY ACT. Writing well involves painting vivid verbal pictures that draw in the reader, mental images that command attention and invite consent. After this activity, I often find that my students' papers do contain more content, more well-thought out ideas, supported with the small particulars which do so much to enrich the whole. They begin to speak more about their own neighborhoods and the real people who live in them, rather than about generic neighborhoods populated by stick figures. Sights, sounds, and smells begin to emerge. Still lives acquire movement. Hypothetical situations take on flesh tones which they did not possess before. In effect, little by little, we move away from mere abstractions, as we, working together as a class, try to build students' writing into more than simple exercises in elementary logic.

And the sensitivity to language and ideas, plus an understanding of how these intertwine in our communication driven world, that our students thus start to develop, serves them very well, not just, of course, on the ACT exam, but also in their college courses in general, and in any situation in which they have to practice the art of communication.

"Gladly Will They Learn and Gladly Teach…": Teaching to Learn

Dolores DeLuise
English

This adaptation of Chaucer's description of the Clerk, or as we would call him, the university student, may aptly be applied to our own students. The heart of learning, he seems to be saying, is teaching, and those of us who have been teaching for some years recognize the truth in this paradigm. It seems as though one learns to teach and then teaches to learn.

A classroom is, in many ways, however, an uncomfortable and unforgiving place in which to learn. While we can't always change the physical architecture of it, we can sometimes foster learning by changing some classroom walls that remain invisible.

The traditional classroom is a ready-made model of power relations. The teacher stands at the "head" of the class, free to speak at will, while the students sit in a physically lower position and must maintain silence unless instructed otherwise. The teacher has a large desk, comfortable enough to actually write on; ironically, it is the student who does most of the writing in the classroom venue on a cramped, one-size-fits-all desk with a writing space containing barely enough room for an opened notebook.

I have, on occasion, played with these boundaries and have found that when invisible lines are tweaked and margins re-aligned, something special is likely to happen. I have played with the notion of relinquishing authority by making small forays into the spaces between student and teacher; as a result, I have been able to teach something that is not on the syllabus. More significantly, perhaps, in terms of my pedagogical practice, I have also learned something not on the syllabus.

I can honestly say that during every semester I've taught, I've learned something new from my students. This semester I learned a new adjective: "wack," but I'm not quite sure yet how to use it. I clearly remember another semester when I learned the word "phat." At the time I was expounding on Romantic poetry and a student commented on the sublimity of the jacket I was wearing. Included in his sentence was the word "phat." At first I thought he was talking about my anatomy, and then we all had a good laugh. I remembered that word and I will always remember the circumstances under which I learned it.

Sometimes I learn something besides assorted pieces of current teen-speak; I have gained, on occasion, a profound insight into something very ordinary or that I had taken for granted. A few years ago in a developmental writing class, for example, a discussion of the word "the" arose. The class and I noticed, during a discussion, that no one seemed to be on the same topic; tempers were short and arguments ensued. I was puzzled; I couldn't get a grip on the problem. What was causing this inability to communicate? I made a sincere appeal to my students to assist me in discovering what was wrong.

At their suggestion, the first step we took was writing down what we could recall contributing to the discussion. As we read our contributions aloud, someone noticed that the word "the" was being overused, and another student noticed that the overuse was related to our communication problem. A discussion of the meaning of "the" went forward. Several students looked up "the" in their dictionaries, but what they found there did not resolve their questions. The students appealed to me to hand down a ruling on the use of the word, which, as an English professor, would have been easy to do. I decided, however, that we were traveling in a positive direction. If the expectation of receiving information from authority became incorporated into their model of learning (the teacher is "up" and the student is "down"), and, indeed, of living their lives, I would not have taught them well. I recalled the memorable way in which I had learned the word "phat," and I

wanted to create such a moment for them, a moment of insight and illumination.

I decided to relinquish my authority in this matter and told the students that without the Oxford English Dictionary, I couldn't provide much more information than they already had. I told them the answer was already among us—we only had to do a bit of investigation to make it clear. I asked them to do three minutes of free writing about the meaning of "the"; they did. Each student read what s/he had written and by the time we completed our reading, we were all bursting with an insight at once simple and profound.

My students discovered that, instead of being merely a commonly used throwaway word, the article, "the" contains a world of philosophy. Here are our findings: It is both universal and particular, indicating both the common and the extraordinary, the unknown and the infamous. We say, for example, "Let's rent the movie," and we mean a particular movie we had been discussing earlier. If we say, on the other hand, "the movies," we mean all movies in general. Similarly, we can say, "The man standing on the corner is panhandling," but when we say "the man," we mean someone special, like "my man." We may refer to an annoying person as "the stupid thing," diminishing him or her into an inanimate object, but when we say "the Donald," for example, we use "the" to signify someone so famous he doesn't need a last name. Had I presented my own definition of "the" for my students, it wouldn't have been as rich and valuable both in meaning and experience.

The "the" incident was not a circumstance I could replicate, but by temporarily abdicating my authority and assigning students the responsibility of making sure their classmates could learn something important, I have been able to explore similar situations. One of my recent composition classes was populated by a number of intelligent and highly opinionated students, the majority of whom enjoyed discussion and debate. The class was roughly divided into students who had strong patriotic opinions, students who were politically liberal, and those who did not regularly participate in discussions, making it difficult to determine what they were thinking, or from the students' point of view, whose "side" they were on. I had never considered the possibility that the fact that some students didn't participate in discussions could prove problematic for others. My own college experience had taught me differently; many of my shy undergraduate classmates had expressed gratitude to those of us who enjoyed responding and we were happy to be able to perform.

Toward the end of the semester, one of the more outspoken students, upon whose frequent logical and insightful comments we depended, yet whose dramatic and sometimes aggressive delivery branded him a loose cannon, became embroiled in a political discussion. He led a charge of liberal-minded, creative students on the left side of the room, appropriately, against the conservative, studious students on the right, literally and figuratively. In addition, on that particular day, he was angry about students who didn't participate. He felt that the students who sat in the middle of the classroom, the ones who only listened, were undermining class discussions because they didn't contribute and that something should be done about it. I was genuinely surprised that he didn't feel as I did.

It isn't my policy to force people to contribute to ordinary class discussions. What to do? I invited him "up" to my desk and took a seat in the class among the students. He relished the position, taking charge of the class immediately. He laid out the issues and assigned classmates to respond to various questions. Because, I think, he felt it his responsibility to bring about some resolution, he managed to bring the different factions together enough to respect others' opinions and politely agree to disagree. This was directly contra his former expectation of what the outcome should have been. Stepping over the border assisted him in gaining a way to develop an overview that was weighted

in logic and reason rather than impulse and emotion.

In addition, he explained his position regarding class participation to the students who hadn't been responding, and demanded they contribute to the discussion in a way I never could have done. He was successful. Each one, most of whom were from other countries—the Caribbean, Thailand, the Philippines, Japan, Korea—and whose English was not fluent, contributed to the discussion. Some were angry; some were hesitant, but all participated. After each contribution, they were applauded by the class.

It was a transcendent moment for me. This, after all, is what America is about—the government of the people, leaders who step up to the responsibility of leading effectively, an inclusive society, the sound of previously silent voices. I could not have brought this about by myself. It was a result of careful abdication of authority, a forthright student leader, and a felicitous class chemistry.

There have been other times I have resolved classroom issues by taking a back seat, most memorably when I turned a class over to two students who performed an "intervention." There were several students in the class whose dislike and antagonism of one another prevented the maintenance of an environment suitable for learning. The two student teachers, after researching techniques of conflict resolution, made an impressive presentation that achieved a remarkable, permanent transformation in the teaching-learning environment.

Chaucer's seven-hundred-year old observation still obtains today: The borders between teacher and learner should be flexible so that teachers never cease learning and learners, by becoming able to teach, are much better prepared to learn. The next time you face a quirky problem not covered in the syllabus and that you're not sure about solving, think of turning some part of its resolution over to your students. You will undoubtedly learn something.

Information Literacy: Assignments that Promote Faculty/Librarian Collaboration

Robert Farrell
Information Literacy Librarian

All good teachers possess and communicate information literacy skills to their students even if they do not necessarily call the skills they possess "information literacy." Information literacy is the ability to locate, retrieve, evaluate, and appropriately use information from books, articles, and online sources typically within the traditional academic disciplines. For scholars, activities such as locating books, using library catalogs, locating articles, using databases, and finding reliable information through advanced internet search techniques are second nature. Through our training and practice we know the difference between popular and scholarly periodicals, what an abstract is, the rules of citation, and what plagiarism means.

However, for many students, such methods of finding, thinking about, and ethically using information are often new, especially for those students who may not have had access to a good high school or public library. As a result, the quality of a student's work often suffers when he or she is asked to do research oriented assignments and he or she lacks basic information literacy skills. As one composition professor has written addressing the result of inadequate information literacy instruction, "professors campus-wide" often "complain about the quality of their students' end products, while at the same time students express equal frustration that they can't find anything on topics that in fact are widely addressed in the literature" (Jenson, 2004). After briefly addressing several issues surrounding information literacy, this paper will exemplify some ways of incorporating assignments that emphasize information literacy and introduce students to concepts that can directly impact the quality of their work.

Why Information Literacy? Collaborating to Meet Gen Ed and Accreditation Goals

Information literacy is a key component of BMCC's general education goals and objectives. The college's General Education Learning Outcome for information and technological literacy states that students should acquire the skills necessary to "collect, evaluate, and interpret information and effectively use information technologies" (BMCC 2004). Through traditional research assignments, term papers, projects and group work, we ask our students to utilize the college library—its books, reference materials, and databases—in order to introduce them to the traditional process of scholarly activity and communication and to encourage them to more deeply explore topics on their own. We do this in an effort to encourage students to go beyond what can be covered in a two- or three-hour class session so that our students will develop strong research and critical thinking skills which will serve them in their continuing formal education and personal self-development.

We also do this to meet our mandated educational goals. In addition to being a campus-wide general education goal, the communication of information literacy skills across the curriculum is also a point of evaluation for Middle States Commission on Higher Education (MSCHE) accreditation (Ratteray, 2002). Oswald Ratteray, MSCHE's Assistant Director for Constituent Services and Special Programs, has noted that in order to meet contemporary information literacy standards "all personnel involved in curriculum development, teaching, the assessment of learning, and individual and institutional improvement will [have to] confront the subject of information literacy" (Ratteray, 2002). Yet the communication of information literacy skills has often mistakenly been perceived as falling solely within the purview of the academic library (Mackey 2005, Ratteray 2002). Within the contemporary paradigm of assessable education goals, collaboration

between librarians and faculty across the disciplines is needed to ensure that information literacy skills become what have been called "course-embedded" (Lidnauer, 2004). Whereas some libraries in CUNY and around the country include information literacy in their curriculum through credit-bearing courses focusing on library and research skills, BMCC seeks to integrate information literacy throughout the curriculum. In other words, information literacy must be included as a part of the specific student learning outcomes projected for courses within the disciplines if students are to acquire such skills. Consequently, Ratteray continues, information literacy instruction "can be marginalized no longer as someone else's (i.e. the librarian's) concern" (Ratteray 2002).

A key part of BMCC library's mission is to assist and collaborate with faculty members across the disciplines in their efforts to communicate information literacy skills to their students. We do this in several ways: by working with departments to plan for meeting information literacy requirements; by providing library instruction sessions aimed at introducing students to basic or advanced information literacy skills; and by helping faculty plan and execute course assignments that have effective and assessable information literacy components.

Not all courses, of course, require a research project, research paper, or term paper; nor should they. Assignments involving extensive library research, that is to say, the gathering of primary and secondary source materials from monographs, journals, and the Web are typically characteristic of upper-level coursework or introductory level courses that require term papers of one kind or another. The research involved is not always appropriate when educating students in the fundamentals of a discipline.

At the two-year college, we often focus on providing our students with the core skills needed to succeed at four-year colleges and with an introduction to the careers and academic disciplines they will continue to pursue. Yet there are many quick, easy and effective ways by which we can promote information literacy even in introductory level courses. What follows is an outline of several assignments from across the curricula that encourage students to develop and exercise their information literacy skills.

Humanities and Social Sciences

Introductory level courses in the social and health sciences typically aim at introducing students to the key concepts of a discipline. Sociology, economics, social work, nursing and other related academic disciplines each possess a unique vocabulary, history, and practical methodology. And each has a rich literature that includes specialized reference works, such as dictionaries and encyclopedias, professional journals, and monographs that explore sub-topics in the discipline at length. The following activities are some of the ways professors have used library-oriented assignments to enrich their introductory courses.

The Research Worksheet

A research worksheet is a handout provided by professors to their students outlining a number of topics about which students must then gather information. Typically, such worksheets include terms which students must look up in a specialized dictionary, key figures or complex concepts in a discipline which students must find in a discipline-oriented encyclopedia, a number of questions that introduce students to the major journals in a discipline, and basic book and database searching. (See Indiana University Libraries 1998). For example, a psychology course might have a worksheet asking students to define five terms from the field using a specialized dictionary, to locate and read an article from an encyclopedia about, say, Sandor Ferenczi, or about separation anxiety, or to locate and provide the bibliographic citation to two books and two articles on a particular topic in the field, such as Asperger's syndrome, or some other issue covered in the course textbook.

Literature Review/Annotated Bibliography
Rather than assign a full-fledged paper, many professors of introductory level courses ask their students to do a literature review or annotated bibliography on an assigned topic. This is a sort of mini-version of what we do in the introductory sections of academic papers. For example, a history professor might assign students to locate three books, three journal articles, and three websites that focus on a specific subject, like the French Revolution. Students would then provide a bibliographic citation for each source plus a short summary of the work's argument. The final aspect of the assignment often involves comparing the sources in terms of their usefulness, quality and reliability. For example, the professor may ask students to compare the information found in Historical Abstracts, a database to which the library subscribes, and information found through Google.

Current Events Exercise
Most topics studied in the social and health-related fields are part of our ongoing lives. In many introductory and advanced classes, students are asked to find a magazine or newspaper article about a topic covered in class using library resources. This is often an ongoing assignment, sometimes weekly. For example, a nursing professor may ask students to find an article every week about changes in the field such as the increasing use of technology, the shortage of nurses in different areas, new specializations in nursing, etc. Each week after finding the article, students would then write a brief response to it along with the article's citation or a copy of the article itself. Such exercises often help to show students the real world import of concepts covered in class while introducing them to fundamental research skills important to continuing professional development.

Research Blogs/Wikis
Many faculty members at BMCC and across the country have begun integrating web-based technologies beyond the standard online course environments like Blackboard. Blogs, or weblogs, are online journals that allow for continuous creation of content, often organized by date, and for others to add comments to original postings. Wikis are collaborative dynamic web sites that allow for real time content editing without the need to access a server or have administrative permissions to modify html code. Educators are often using such technology as a way of facilitating communication with their students, and among the students themselves. Rather than assigning research worksheets or annotated bibliography assignments to be turned in at some point during the semester, faculty are using blogs and wikis to have their students post citations to research related to their coursework, annotated bibliographies and questions about the research process that can be responded to quickly (Martindale 2005). Additionally, faculty can use the online environment to allow librarians to respond directly to student reference or research questions posted on blogs or wikis. While such technologies may not possess any inherent educational value, when used in conjunction with an assignment that incorporates information seeking tasks they may offer students and faculty a new and effective form of communication.

Arts and Sciences
In the arts and sciences, research projects and literature surveys are often not assigned until students reach the level of advanced courses. However, in introductory level courses many professors have found a place for assignments that put textbook-oriented survey material in a richer light.

History of Science/Mathematics Assignments
In a previous volume of *Inquirer*, Professor Annie Yi Han of BMCC's mathematics department describes an assignment incorporating the history of mathematics within her course in discrete mathematics. She notes that "incorporating the history of mathematics research projects in the classroom … makes learning discrete mathematics a meaningful and lively experience for my students ..." (Han, 2003). Students in her class research either a theorem or mathematician over the course of the semester, meet with her to discuss their project several times and submit a bibliography prior to submitting their final project at the end of the semester. Students also have the opportunity to present the projects to their classmates if they so choose. In addition to their pedagogical value, such historically-oriented assignments encourage students to develop information seeking skills valuable to independent learning and curiosity. Such assignments can also be effectively used in arts and theater courses.

Locating and Evaluating a Primary Article
For students in an introductory science class, the idea that what they are learning forms the basis for advanced research in a discipline is often quite remote. A small assignment that involves locating and evaluating a primary research article within the literature can often provide students with a deeper perspective on their coursework. The BMCC library subscribes to hundreds of journals in the physical, biological and chemical sciences that are accessible through a variety of subscription databases. Within an introductory chemistry course, one might assign students to find and evaluate a current research article that deals with a particular element. After finding an article, one might have students evaluate the key parts of the article including the abstract, the introduction, the methodology, the results and the conclusion (See Cummings and Vaughn, 2001). Such an assignment not only develops information literacy skills that can be transferred to advanced science courses if a student pursues that course of study, it also introduces students to the practice of science itself.

Many of the ideas listed above under "Humanities and Social Sciences" can also be adapted to the sciences. The research worksheet most easily translates into the sciences, introducing students to the basics of the research process without requiring them to write a paper.

Conclusion
The reason for including information literacy within courses where it is appropriate is simple. Students need to be able to use information sources in a variety of formats, from specialized encyclopedias and dictionaries, to books, articles, and websites if they are to become skilled and efficient at tasks they will be expected to perform throughout their educational and work-related lives. Without a meaningful assignment that in some respects forces students to visit and use the library, its databases, and various collections, a certain aspect of their education is left to chance.

Collaboration between librarians and faculty within the disciplines is necessary to ensure that we as a college meet our information literacy goals. Each semester, BMCC librarians are available to provide tailored library instruction sessions to help facilitate student acquisition of skills needed to complete course assignments that include information literacy components. We are also available to discuss and evaluate current and proposed assignments in order to see if they are meeting both our general education goals and the MSCHE mandates. Towards that end, a selection of useful websites relating to the integration of information literacy activities across the disciplines has been appended to this paper.

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Appendix

Integrating Information Literacy across the Disciplines: a selection of Web resources

1. Integrating Information Literacy into the Liberal Arts Curriculum – Discipline Specific Resources

www.denison.edu/collaborations/ohio5/grant/examples/index.html

Five Colleges of Ohio

These materials have been gathered from a number of sources, including courses proposed, modified and created under sponsorship of the Andrew C. Mellon Integrating Information Literacy into the Curriculum grant; submissions to the site from visitors; searches of library and discipline-specific literature; and searches from the WWW.

2. Creative Assignments Using Information Competency and Writing

www.library.ohiou.edu/libinfo/depts/refdept/bi/alternatives.htm

Ohio University

This is a list of assignments which are not "just term papers" and which teach a broad range of information competency points.

3. Incorporating Information Literacy Skills into Your Classroom

www.lib.colum.edu/learn/faculty/information_literacy_classroom.htm

Columbia College Chicago

Features five basic information literacy skills that can either be taught in your classroom or in a library instruction session

4. Designing Effective Assignments That Incorporate Information Literacy Skills
www.ketch.alaska.edu/library/designing_effective_assignments.pdf
University of Alaska – Southeast
Keys to successful assignments that incorporate information literacy skills

5. Integrating Information Literacy into the Curriculum
www.wesleyan.edu/libr/instruction/infolit2.pdf
Wesleyan University Library
A list of projects and assignments as a set of possibilities for integrating information literacy skills into the curriculum. Any of these ideas can be modified or combined in various ways appropriate to their context.

6. Term Paper Alternatives
departments.kings.edu/library/termpaperalternativesr.htm
King's College (Pennsylvania)
Assignments that develop research skills traditionally associated with the research paper.

Information Literacy and the Relevance for College Students

Helen Mele Robinson
Teacher Education

American society is currently in the information age with an economy that is built on knowledge rather than the goods and services of the Industrial Age (Bitter & Pierson, 2002). According to Nye and Owens (1996), the 21st century will be the period of America's greatest preeminence. The United States is better positioned than any other country to multiply the potency of its power resources through information. Students need to be prepared for the challenges of dealing with information encountered and equipped to enter the technological workforce. Information students come across needs to be evaluated and considered for accuracy. The skill and knowledge necessary for dealing with information has come to be known as information literacy. The National Forum on Information Literacy (NFIL, 2006) defines information literacy as the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue at hand. In a more succinct explanation it is the information we come across and process. Students need to learn about effective interpretation of information to be processed in order to convert this currency into knowledge.

There is a bombardment of stimuli from television, computer games, video games, and web site meanderings on the Internet. Educators are currently facing the challenge of preparing children to decipher the multitude of information being presented. Teachers, who may not have grown up with computers, and the Internet offer a valuable skill to students, that is to learn to decipher fact from fiction for the information encountered. According to Eshet (2002), information can be grouped into three categories: primary objective information, synthetical information, and primary subjective information. Primary objective information is the unbiased facts of information, such as data about the weather or census reports. This is clear cut and factually oriented information. Synthetical information is data found in journals or scientific articles. This information is usually more sophisticated and validity can be assessed from the evidence provided. The challenging gray area of understanding information is primary subjective information presented in magazines, newspapers, blogs, advertisements, and on Internet web sites. In the stories and tales encountered, truths and falsehoods blend; the information is often very biased in nature and legitimacy may be difficult to assess.

The ability to discriminate fact from fiction was tested in a study by Eshet (2002). Adults of ages 30-40 and students of ages 14-15 were asked to assess and rate the quality and objectivity of news presented on several Internet sites. The critical thinking needed for the task was a significantly higher ability (49%) for the adults, while the youngest participants' rating was significantly lower (15%). The teens might be more comfortable interacting with video games or computer program activities, but the adults possessed stronger skills in understanding whether information presented on web sites was fact or fiction.

As an instructor with over ten years' experience teaching college students, I have observed students' difficulty with the issue of understanding what information is valid and what should be questioned. Through classroom discussions and assignments, I guide students to confront and learn to understand the issue of primary subjective information. I currently work with undergraduate education students in a community college setting. One of the courses I teach is social studies in early childhood education. As a class, we tackle issues such as the validity of historical information in children's picture books, the accuracy and inclusion of African Americans in American history textbooks, and the usefulness of online teacher resources for curriculum planning. I encourage students to

question whether or not the information presented is accurate. Through discussion, the students begin to understand that information found in textbooks or on web sites should not be considered the final word on a topic. I offer assignments that require students to decide the validity of information presented and to use the Internet to complete the task.

There are two problems students often deal with when completing assignments that require online browsing. The first dilemma is that students seem to have difficulty finding sources that are valid for the purpose of the assignment. The second challenge is for students to understand when use of words and quotes from web sites equals plagiarism. Students mention that when they are conducting searches, they begin to meander to other web sites and links. They state that while browsing online there is such an influx of information that they feel overwhelmed.

There is a fact-finding assignment I give my students in a 300-level course dealing with learning about early childhood curriculum content. The objective of the task is to help them learn about examining information for validity and usefulness, while actively encouraging students to use someone else's ideas and stay focused on a topic. To accomplish this goal, the students are asked to use a thematic focus to find, select, and adapt ideas found online to plan activities for a class of young children. Students work with a partner to complete the project, focusing on the content areas of social studies, science, math, and art.

I explain the assignment by discussing the difference between educational web sites with URL addresses that end in *.edu*, *.org*, *.net*, or *.gov* and commercial web sites that end in *.com*. I offer a list of possible web sites to get the students started on understanding the elements of appropriate educational web sites. I offer instruction on how to copy and paste ideas from web sites to Microsoft Word (by right clicking on the information, selecting copy, and then pasting the document to an open Word file). Students are expected to find possible activity ideas, then change, add to, and adapt the beginning idea to fit the framework of detailed information needed for the assignment. For each activity developed, the URL link is posted at the top of the page. Therefore, for this assignment students are encouraged to browse education web sites, find and use ideas, acknowledge the source for each idea, and change the original information according to assignment guidelines.

I have used variations of this assignment for about five years. Although I have noted that current students are more adept with computers, I have also observed that the challenge of evaluating information seems to be a daunting task for many students. Confronting primary subjective information seems to be a puzzling quandary for these college students. Working with partners assists with the process of discussing the information and deciding the validity and usefulness of the material. Although some students express how daunting the task seems to be, there is general student consensus that the assignment assists with teaching the skills of staying focused when searching online and utilization of discriminatory skills for selecting information.

The information literacy skills this assignment enhances are tools students will need as future teachers deciphering information encountered. Guiding students to develop their information literacy skills will help them to be better prepared to enter the technological workforce.

Fair-Division in the Restaurant Industry: Exploring the Mathematics of Tipping

Jenna Hirsch
Mathematics

Many liberal arts mathematics classes teach students the mathematics of "real world" situations. For example, how many different ways are there for us to count votes? Is it possible to divide the assets of a couple during a divorce so that both parties are happy with the division? What is the best way, mathematically speaking, to cut a cake, and ensure that everyone is happy with the piece of cake they choose? How do roommates divide their rent when there are two different-sized bedrooms available? All of these questions can be answered using the social aspect of mathematics.

If you have worked or eaten in a restaurant at any point in your life, there is one type of mathematics that you are surely familiar with—the mathematics of tipping. The etymology or origin of the word "Tip", although not agreed upon, is thought to come from jars left in 18th century British coffee houses. The jars were left for customers to put money in them for the waiters or waitresses "To Insure Promptitude."[1]

Starting January 1, 2006 the New York State minimum wage for workers is $6.75. However, workers that are tipped (known as "tipped workers") have a lower minimum wage, only $4.35. There is, of course, a reason that "tipped workers" earn $2.40 less than their non-tipped counterparts. Most money that wait staff at restaurants earn comes from customers in the form of tips.

Many countries practice the act of tipping. However, some people believe that Americans tend to tip more than their European counterparts. Often, European restaurants tack the tip right onto the bill, making the customer's decision an easy one. The general rule for American tipping is somewhere around 15% to 20% of the pre-taxed bill. The unwritten though widely known recommendation for American tipping is 15% for minimum service to 20% for excellent service at 4 star restaurants.

There are three different forms of tipping: Individually Earned Tip, Collective Pot Tip, and No Choice Tip. Individually Earned Tip (IET) is exactly what one thinks of when they are used to tipping. In the IET model, the customer determines how much they would like to tip the wait staff, again, somewhere between 15% and 20% of the pre-taxed bill, and adds that amount onto the bill. The wait staff pockets that amount and takes it home. Collective Pot Tip (CPT) is another method of tipping. In the CPT model, the wait staff collects the tips together, pools them into a larger pot, and divides the pot equally between all of the wait staff on duty at that time. The No Choice Tip (NCT) is when the restaurant includes a percentage of the bill in the check, and the wait staff receives that amount regardless of what the customer believes the tip should be. Most of us have seen on menus the following quote, "For parties of 6 or more people, an 18% gratuity will be included on your bill," an example of the NCT algorithm. The NCT algorithm is also used in select restaurants for any sized party, ensuring that their wait staff will earn a certain tip.

Different restaurants vary greatly in choosing their tipping methods. While completing my graduate training in mathematics, I worked at a restaurant to help pay the bills. I was unaware that the tipping model was the CPT model, until my first day of work. This led me to wonder why a manager of a certain restaurant would select one tipping method over another. Is there one method that managers and wait staff tend to view as being more or less fair? These questions can be explored and answered using the Fair-Division Procedure.

Mathematically speaking, if our students posed some of these questions, it may be

[1] Dickerman, Sara, www.slate.com/default.aspx?id=2073161

quite hard to use what students normally think of as mathematics-numbers. However, we could use this as a lesson in a social issue in mathematics; suspend disbelief for a second. Ask our students how they would like to earn tips if they are a team of wait staff. Discussions with the students may prove that many of them have waited tables, or worked in a restaurant at one point in time. Ask them the different methods that their manager employed to give them their tips. Have the students discuss if they were managers of a restaurant, what type of tipping algorithm they might use with their wait staff.

Fair-Division in mathematics describes different conditions in matters such as divorce, collective bargaining, game theory, international disputes, and many other sorts of negotiation. It allows parties to settle disputes involving issues or objects with certain mathematical guarantees of "fairness."[2] In the present context, I will look at fairness from five perspectives:

1. Pareto-Optimal: (a measure of efficiency) A Pareto-Optimal allocation is one for which there are no gains from trade. In other words, it is impossible to make one wait staff better off (in terms of the amount collected in tips), without hurting the other wait staff.
2. Envy-Free: Which of the three models will elicit the least amount of jealousy between wait staff?
3. Equitable: Which of the three models will most likely reward the hard working wait staff, and penalize those that don't work hard?
4. Influenced by lying: Which one of the three models will help to mitigate lying, stealing or cheating by the wait staff?
5. Computable: Which of the three models is the most computable model for the wait staff or management in computing the tips?

At one restaurant where I worked, management chose to use the CPT model. One advantage of the CPT model is that wait staff tends to help each other out. Each wait staff is not only responsible for his or her table. On the contrary, each becomes equally responsible for every customer in the restaurant, as their tips both indirectly and directly affect the amount of tip each of their co-workers brings home. It creates a cohesive atmosphere, where each wait staff person is working to better all of the other wait staff's tips in the restaurant, and in doing so betters their own. However, at the same time that it encourages cooperation and mutual aid, the CPT model often instigates a lackadaisical attitude among the wait staff. Many people in the wait staff are not as hard working and thorough in their job, as they know that their tip will only be minutely affected. This laissez-faire attitude has a deleterious effect on business and public relations. The CPT model also prompts disorganization as one customer's table can be handled by numerous wait staff.

The IET model favored by many induces each wait staff in the restaurant to work as hard as he or she can. The rule of thumb is the harder a person works, the more appreciative the customer, and the larger his or her tip. However, the IET model also has some drawbacks. Wait staffers may become jealous of other wait staffers due to the amount of tips that they are earning. One person may randomly get customers that tip a lot, regardless of how hard he or she may work. A hard working wait staffer may receive a small tip regardless of how hard he or she may work.

Usually, wait staff are assigned groups of tables. The more people at one table, the larger the tip. For restaurants using the CPT model, this does not matter to the wait staff. However, for restaurants that chose to use the IET model, this can be significant. Wait

[2]COMAP. (2003). *For All Practical Purposes.* 6th edition, W H Freeman and Co., NY. p.475

staff usually vie for the area of the restaurant (or stations) with bigger tables, as they will get more customers, and a larger tip. This causes tension within the wait staff community, as most people will request these "stations" to ensure larger tips.

The NCT model has some pros and cons as well. Wait staffers working at restaurants that employ the NCT model have no real motivation to excel in their job. They know that they are guaranteed a tip-typically over the normal 15%, regardless of how hard, or how little they work. This "guarantee" of tip can cause an atmosphere of toleration in the restaurant. The wait staff tolerates the customers, but has no reason to give them anything but mediocre service.

Let's explore some differences using the definitions from Fair-Division for the three possible models of tipping.

1. *Pareto-Optimal* –The Pareto-Optimal condition can't be defined for the NCT model. Wait staff do not have any choice in terms of how they can earn their tip. The IET model is Pareto-Optimal because tipping is added on to the check, and is a customer's choice; all of the wait staff earn extra. Each experience is different with their customers, and each person has a unique way to earn more money. If one wait staff doesn't earn as much as they want to, no other wait staff's tip is affected. The CPT model is also Pareto-Optimal, obviously, due to the tips being evenly divided among the wait staff.

2. *Envy-Free* – The CPT model can be envy free, as long as the wait staffers are working equally hard. However, what happens if one wait staffer is working hard, and another is doing a minimal amount of work? The hard-working wait staffer may become envious because his or her share in the pot is equivalent to those putting in a minimal amount of work.

   The IET model also tends to be envy-free. Regardless of how hard a staff may work, they could get a group of customers who simply can't afford to tip well no matter how hard the staff works. Conversely, a lazy wait staff may do minimal work, and randomly get customers who enjoy tipping well. In either case, each receives an equal tip so there is no cause for envy.

   The NCT model seems to be the most envy-free. The only variable that may cause envy in the wait staff would be the size of the tables in their stations. The larger the table, the more food ordered, the bigger the tip. However, most restaurants have systems that assign wait staff stations, thus minimizing the cause for envy.

3. *Equitable* – The CPT model is not at all equitable. Frequently, it happens that the harder a wait staff works the more money he/she receives in tips. As stated above, if a few people work really hard and end up receiving large tips, they are not affected as directly as they would be had they used the IET model. They still need to take their tips and distribute them to other wait staff that may or may not be hard workers.

   However, the IET model is almost equitable. Again, as stated above, the harder a person works, the more appreciative a customer becomes, and the larger their tip. It may happen that a person works hard and receives a little tip; however, the probability of this happening consistently during a person's shift is fairly low. The NCT model is also equitable. Everyone receives an equal tip, regardless of their work ethic.

4. *Influenced by lying* – The CPT model is extremely influenced by lying. There are many people that are angry about sharing their pot, or feel that they work harder than other wait staff and in turn deserve more. These people often tend to pocket big chunks of

the tip, and leave a nominal amount to put into the pot. This is one of the problematic areas of the CPT model. The IET model is also susceptible to lying as at some restaurants the wait staff are required to "tip-out" bussers, coat checkers and food preparers. However, it is not as influenced by lying as the CPT model. The NCT model is not influenced by lying, but it is susceptible to similar situations as the IET model.

5. *Computable* – The most computable model is the NCT model. Wait staffers pocket a permanent percentage of all of their bills. If a check is lost, or a problem occurs, all that is needed is the total of the bill, then compute whatever the percentage the restaurant allocates.

   The CPT model is hardly computable. It is necessary to calculate the amount of people working at one time, the amount of hours that they work, and calculation becomes even more complicated if some of the shifts overlap. If shifts overlap, then wait staff have to wait for their tips.

   The IET also seems to be computable. However, not as computable as the NCT- if a check is lost, it is impossible to figure out your tip. Assuming the check isn't lost, the customers do the work for you, tacking your tip right onto the bill.

Students tend to be naturally curious about what they deem as 'real world' mathematics. The above five conditions talked about in the paper are not just fair-division procedures for tipping. Many situations that involve fair division can involve the five conditions above. Teachers can motivate their students to come up with other fair-division problems, and define each one of them in terms of the five conditions. Ask the students to devise their own fair division procedures. For example, many students have roommates-naturally chores have to be divided between them. How do they do this without causing conflict? How do they define the cleaning procedures based on the five conditions above?

While all three models have their pros and cons, it is necessary to consider why a restaurant owner or manager would choose one tipping method over the other. The NCT model appears to have more advantages than the CPT model and the IET model. So why wouldn't every restaurant use the NCT model? From observation, in fact, it seems that this model is the least likely to be used. There are three major social issues behind this model. First and most important, customers want the freedom to choose their tip. If not allowed the choice, this could cause frustration with the customers. Second, people may feel that the service is lacking, and that the tacked on tip is too much. Third, some wait staff may lose out because they would have made more than the tacked on percent if the customers had their choice.

Which one of these algorithms best adheres to the Fair-Division conditions? The IET model comes close; however it is not completely envy free. The CPT model isn't computable. Perhaps a combination of the two may be more appropriate, and lack internal envy. But, a combination of the two models would not be easily computable.

How do we use a manager's personal ideals of how a restaurant should be organized to choose a good tipping model? How do we account for the fact that tipping is an individual's preference, and not mandatory? How do we take into account that what one person considers good service, another may not? How can we come up with an algorithm for tipping that takes into consideration the widespread view that hard workers should receive more money and lazy workers should receive less? How do we define hard work?

In order to come up with an algorithm that suits the Fair-Division conditions, we have to begin by answering these questions. Perhaps there is not one algorithm that we can use to suit our needs. Perhaps different restaurants with different owners need com-

binations of the tipping models to help their businesses run smoothly. Unfortunately, we have not yet found the perfect one.

What about the wait staff that each tipping model attracts? Enlarging the picture to several restaurants instead of one, if some use the CPT model and others use the IET model, will the best wait staff prefer to work at the IET restaurant? If so, does that imply that the restaurants using the CPT model will tend to attract less experienced, non-motivated wait staff? Will this lack of good wait staff cause customers not to return?

These are all important questions that a manager or owner of a restaurant has to ask him- or herself, in order to guarantee quality service in their restaurant. Restaurants are notorious for their lack of job satisfaction and internal bickering. A restaurant with a happy wait staff is a restaurant that will run smoothly, and will treat their customers well. Having happy customers implies return business and good "word of mouth" public relations. To an owner of a restaurant, this means the most important thing–more money.

Tipping is just one example of a social issue in the mathematics of fair division. A closer look at fair division usually demonstrates that mathematics is in fact, used much more than we give it credit for. Not only in algebra, calculus, differential equations–and so on, (the mathematics courses we call school math) but mathematics is a part of our universe in many social issues as well. Encouraging our students to use their critical thinking skills they learned in college, for mathematics they may need in the real world one day, is a goal for many mathematics teachers and professors alike.

When the Instructor Must Take the Back Seat

Leonid Khazanov
Mathematics

In the fall of 2005 during my third year of employment at BMCC, I was scheduled to teach Mathematics 010 for the first time. Mat 010 is the lowest level remedial mathematics course offered at our college for students lacking basic arithmetic skills. Students enrolled in this course score less than 20 on the prealgebra portion of the Compass Examination which is currently used to establish the minimum mathematics proficiency for all CUNY students. Even though the passing score is set very low (27 is required), math 010 students are unable to get even close to the required minimum. From conversations with my colleagues who had taught the course, I learned that most of the students come from underperforming inner city schools where they failed to learn the very basics of arithmetic: operations with whole numbers, fractions and decimals. They have developed almost no number sense.

Many of the Math 010 students suffer from mathematics anxiety and have a deep-rooted aversion to mathematics; a remark like "I hate math" is a common way for them to vent their frustrations. In addition, many of the students lack motivation, and they bring to the classroom the adolescent attitudes characterized by vesting all the responsibility for their learning in the hands of the instructor. For example, they would not do the homework if it is not collected; they get off task, while working in small groups if the instructor is not watching them; often, they come late to class and display extraordinary ingenuity in offering all kinds of excuses for not doing the required work.

In spite of my awareness of the above difficulties, I endeavored to teach the course with a good measure of confidence. My confidence stemmed from the fact that I have more than 25 years of experience teaching mathematics at different levels in Russia and the United States. On top of that, I just graduated from a prestigious university with a doctoral degree in mathematics education where, among other useful courses, I took a course entitled, "Development of Mathematical Thinking." This course equipped me with the state-of-the-art approaches to teaching basic arithmetic and informed me about the different strands of competence my students needed to acquire. For example, I learned that in addition to facilitating the development of conceptual knowledge and procedural fluency, I also needed to design activities aimed at fostering strategic competency, adaptive reasoning, and productive dispositions ("Adding It Up," 2001). Therefore, I had done quite a bit of planning before the beginning of the semester and prepared some useful instructional materials and tasks. I felt that with my experience and thorough preparation there was little to worry about.

The reality, however, turned out to be more complex and unpredictable than I anticipated. From day one, I was bombarded with numerous problems. How should I treat these students—as immature teenagers, or as adults? How can I alleviate their fear of mathematics and of testing? How would I get them actively involved in taking responsibility for their learning? I tried many things in that class. First, I tried the discovery method. Students were unresponsive. They were not interested in *discovering* mathematics for themselves; they wanted to be told what to do and how to do it step by step. When I showed them different solutions to a problem, they often became confused. Some of them even became angry with me and vented their anger in an inappropriate manner. In spite of my best efforts, the students did not seem to want to learn *mathematics*. What they wanted was to memorize some *rules*, and they wanted *me* to make it easy for them.

At times I got distressed by the antagonism and resentment that radiated from some students; however, I did not give up. I tried to foster the formation of a *math-talk* learning community by having students work in small collaborative groups; it seemed to work for

5 minutes, but students quickly got off task. I also tried designing interesting real-world problems, which I believed would motivate them. One situation was particularly disconcerting. I spent a good portion of the weekend preparing for class and managed to design what I believed would be a winner with my students. It was a set of 10 problems pertaining to the cost of riding the city subway. My good friends and colleagues had advised me, "Give them more real-world problems." What could be more *real world* than figuring out the cheapest way to ride the city subway? This was *decision-making* at its best: after solving all problems in the set, students would figure out for themselves whether buying a monthly card or several discounted cards would be more economical for their riding pattern. To my total surprise and profound chagrin, the students showed little enthusiasm for the problems. One of them even suspected me of having been hired by the Port Authority as an advertisement agent. Another student informed me that the problem was irrelevant to his circumstances, because he could barely scrape up enough cash to buy one ride at a time. Frankly, at this point a defeatist disposition began to take hold of me; I vowed to myself that I would never volunteer to teach this course again. Still, the semester was not over, and I had no choice but keep going.

Amongst all the frustrations and setbacks, there was one development in that class which could be cautiously labeled as positive: students' fear for making mistakes diminished, so they were not afraid to go to the board to display their solutions. In part, this can be attributed to the fact that I myself make occasional careless mistakes when solving problems on the board. At first, students were highly resentful of my mistakes, and one of them even had the nerve to tell me that I shouldn't be teaching the subject if I make mistakes. After I explained to them that people are wired to make mistakes, and that the key to success in arithmetic is not in trying to avoid mistakes by all means but rather in developing the ability to look at one's work critically so that one could catch and correct them, the students became more tolerant of my slip-ups, as well as the mistakes made by their peers.

But even more importantly, I made it a point to show my students how they could learn from mistakes, both their own and those of others. We also played a detective game trying to track down the roots of some misconceptions. To give an example, I noticed that one student frequently gave wrong answers to problems that involved performing operations with fractions and then reducing them to lowest terms. To my surprise, he would do most of the steps correctly and then, at the very end, produce the wrong answer. For instance when he had to reduce 4/16 he would write 4 for the answer instead of 1/4. When I prodded him for an explanation, he said that 4 is not divisible by 16, but 16 is divisible by 4, so the answer must be 4. As it turned out, the reason was that his grade school teacher, when teaching whole numbers, told his students that in long division there is a simple way of knowing whether they properly arranged the dividend and divisor. He emphasized that the answer should always be a whole number. If it is not, then they should rearrange the terms so that division would be possible. This guideline probably worked well in the short run and provided elementary students with an easy mechanism for correcting the mistake associated with inappropriate arrangement of numbers for long division, but it also set the stage for future misconceptions, since some students apparently made an erroneous assumption that the answer to a division problem must always be a whole number. Inappropriate extensions and generalizations are often made by students even without an explicit suggestion from the teacher, but in this case the teacher reinforced this propensity by indicating what an answer to a division problem should look like. The teacher probably never said that the guideline applied to whole numbers only, since students knew of no other number sets at that time.

After I helped the student to understand the origin of his misconception, he made the mistake less frequently, but even then he did not unlearn it entirely! The teacher's

authority probably still wielded some mysterious power over him because he stopped canceling fractions at all. He now knew that the answer does not have to be an integer, and, in fact, cannot be an integer when the original fraction was a proper fraction; yet he was unable to force himself to write the correct answer because it contradicted something that was so deeply ingrained in his psyche. Interestingly, Jim was not alone in his fear for cancellation of fractions. Another student admitted that he was afraid to cancel fractions because his former teacher used to write all kinds of scary remarks on the margins of students' books next to their mistakes: he used words like "danger," "handle with care," and "watch out" to alert students. That teacher was certainly motivated by a laudable goal: he wanted his students to avoid mistakes in cancellation; but the results, at least in regard to one student, were very far from what he envisioned. Fear proved to be a poor companion to learning; the student stopped canceling fractions at all to avoid making a mistake. My student never told me whether the teacher explained to the class how to handle fractions with care, but he apparently never learned it. He preferred not to handle fractions at all for the next 10 years.

The idea that mistakes are bad and should be avoided at all cost is extremely unproductive and discouraging. It is much more useful for students to think about mistakes as stemming from incomplete rather than totally incorrect knowledge that needs to be replaced. A phrase like "forget everything you learned about this topic before" is unproductive at minimum. Trying to build new knowledge as if students were clean slates would contradict the principal tenet of constructivist epistemology, that all knowledge is constructed. If students forget all they learned before, then there is nothing to build new knowledge on. What students need is reorganization and refinement of previous knowledge rather than complete eradication and replacement (Smith, et al., 1993).

Towards the middle of the semester my students had less fear for going to the board, because when they made a mistake and some of their peers started to giggle, they would cite me and say: remember what the teacher said: "Don't judge my work before I am finished; the important thing is not to avoid mistakes but know how to correct them." This habit of self-regulation that is considered one of the main characteristics of a successful problem solver gradually began to take ground in that class. Students checked their answers more often and looked at them with a more critical eye. Of course, they still made mistakes and sometimes were unable to pick them up even by checking. Here is one interesting example. The problem was to divide *4.6* by *0.2*. The student wrote *4.6 0.2 = 2.3*. He remembered to check division by multiplication, so he wrote 2.3 0.2 = 4.6 correct. When multiplying, the student actually lined up the decimal points in the product as it is done in addition or subtraction. Although the student made an error, he had learned that looking back and checking was an important step in solving a problem.

The most remarkable, inspirational and significant development, however, came to pass at the end of the semester and, as is the case with some discoveries in science, it happened not because of a purposeful action or careful planning on my part, but simply out of luck. One night, after eating cold yogurt after class, I felt that I was losing my voice. I had no idea how I would be able to teach on the following day, but taking a day off just one and a half weeks before my Math 010 students were scheduled to take a high stakes test was an option I was reluctant to consider. So I walked into the classroom and told my students upfront that I had a sore throat, and that I would have to talk almost in a whisper during that lesson. The topic of discussion was area. I drew a few pictures on the white board and began explaining. About 15 minutes into the lesson my voice cracked and fizzled out; I could talk no more. I desperately looked at my students. What were they going to do? Were they once again going to give me a hard time? To my relief, they were compassionate. Some suggested that I dismiss the class and go home. I hesitated…

And then, a momentous thing happened. One student raised his hand and said,

"Professor, I know a little bit about area. If you don't mind, I can teach this topic for you." To say that I was surprised would be an understatement - I was completely stunned. If this had been calculus or even math for liberal arts, I would have understood. I could have even understood if a student from a basic algebra class volunteered. To have, however, a student teaching a Math 010 class was an event of such cosmic proportion that I was petrified. The pause probably lasted no more than 15 seconds, but if I were Marcel Proust, or James Joyce or Kafka, I could probably write a hundred pages about the stream of thoughts that raced through my mind during that short time span.

Jim, the volunteer, was a student who often tried my patience. He would sometimes come late to class and then ask me to explain to him what I had just explained to other students. He would also at times challenge my teaching style and pedagogy. He would pick the hardest problem he could find in the book and ask me to do it. When I observed that he lacked the basic skills to solve the problem he would respond that he'd rather learn these skills while solving hard problems. "It makes it more interesting." I knew that Jim's strength was his ability to write neatly, that he was confident, well spoken and had excellent communication skills. But he also made lots of bad mistakes and could easily make a mess out of the lesson. The dilemma was tough. Should I trust my students? Would they be able and willing to look critically and yet genially at Jim's cavalier attempt at teaching? I knew from reading about learning in small collaborative groups that a confident but incompetent student could easily lead his more timid peers astray, even if they were more knowledgeable. And it would be impossible for me to intervene since I was unable to talk. Certainly, I could still write, but would that be enough? These and dozens of similar questions flashed through my mind over the 15 seconds; my thoughts were condensed like the Universe before it started to expand.

In the meantime, Jim was losing patience. "So professor, just tell me, do you want me to teach or shall we go home?" That question was the deal breaker. I definitely did not want them to go home before they had a chance to learn how to solve problems that involved area. So I took a deep breath and motioned Jim to the board. I pointed to the problem in the book which he was supposed to explain to his peers. The problem involved evaluating the area of a geometric figure by first partitioning it into several parts each of which was a rectangle, then finding the area of each rectangle, and finally adding up the areas of the component parts. It is common practice for the teacher to explain the method and then ask students to solve similar problems, but this time it was different. Jim had to figure out for himself how to do it and then how to explain it to his peers. It was a formidable task to accomplish and I waited in suspended animation.

To my delight, Jim quickly figured out what to do. He managed to break the figure up into rectangles and find correctly all the necessary dimensions of the component rectangles but one. Other students were watching him like hawks. Someone immediately noticed the slip-up and it was corrected promptly. It looked like the entire venture was going to be a resounding success.

But then Jim stumbled; instead of using the correct formula for the area, he simply added the length and the width of each rectangle and then added up all the numbers to get the answer. Students who watched him very carefully froze. Jim sounded so confident that no one had the spirit to confront him. I noticed from their intense and mistrustful looks that some of them were not comfortable with Jim's answer, but they did not have the courage to say it. At this point, I would definitely have intervened under normal circumstances. I probably would have said that Jim did a good job and that he just needed the correct formula for the area to get the answer right. And I would have provided the formula. (At that point Jim had erased the formula from the board because he writes big and needed all the space.)

I was very glad this did not happen, because after a while the silence was broken

and one of the students said, "You have the answer in inches, but didn't he (the professor) just tell us that the answer should be in square inches or feet or whatever." Jim quickly agreed. He changed inches to square inches in the answer without a wink. Students became emboldened. "Look," said another student, "you are adding inches, so how did you get square inches in the answer?" Jim was not sure what to say. "Well, if the answer has to be in square inches, isn't that what I am supposed to write? I guess when you add inches to inches they become square inches." Some students nodded in affirmation. Then one of the students made the key observation: "Aren't we getting square inches when we multiply?" "That is right", added another student. "Shouldn't we have multiplied to find the area?" Now Jim himself remembered the correct formula. He quickly corrected the mistake and computed the correct answer.

My joy was overwhelming. Not only did they manage to solve this difficult problem completely independently, they ultimately used the discovery method of their own free will. They also legitimately assumed the ownership of (and responsibility for) the solution as a group (note the emphasis on we). Wasn't that something to be happy about?! My glee probably had a healing effect on my voice, and at the end of the lesson I was able to say a few words and complement my students on the achievement. I could see how some of them experienced a joy of discovery, maybe for the first time in their lives.

So what were the consequences? The happy ending scenario would have it that from then on my students would want to repeat the experience, if not do it all the time. Unfortunately, that was not the case. As soon as I got my voice back, they too went back to their usual ways and nudged me to explain everything. Yes, they would volunteer to go to the board even more frequently, but they would once again look at me waiting for a prompt as soon as they hit a snag.

So was the experience on the day I lost my voice just a fluke, a one-time event that was due to a unique confluence of circumstances (my sore throat, their being compassionate, and the impending Compass test), or was it something that could be orchestrated given the right incentive? At this point I do not know the answer. There was very little time left in the course for me to test this out. I tried to cajole my students into repeating the experience by reminding them what a good job they had done on that day and how happy they had been. I told them, "Imagine I cannot talk, or I have an emergency and must leave now." All was in vain. They did not want to imagine things like that. They cherished the safety of my being there for them.

History shows that people are capable of extraordinary achievements when they are in extreme circumstances, and that they may be unable (or unwilling) to repeat the feat in ordinary circumstances. Anecdotal evidence is abundant: a man of ordinary ability who jumped over a fence 2.5 yards high while running away from a fierce dog; a woman who did not know how to swim, but managed to save her child from deep water; two terminally ill U.S. presidents who managed to live to the fourth of July, but not a day more. It is common wisdom, however, that ordinary people rarely perform to the best of their ability, so we may not even know what that ability is.

One may wonder if there is any value in an experience that seems to be so hard to replicate. I tend to believe that the answer is affirmative. I hope that although my students did not change their attitudes and dispositions appreciably immediately following the superior work they had completed independently on that day, the experience will not pass without leaving a mark. It is tempting to think that the joy of a job well done which some of them clearly felt, the memory of performing to the best of their ability and acting as a community of motivated and competent learners will leave a lasting impression on some of them and surface one day. I would like to think that it was the stress brought about by impending high stakes tests that made them shy away from independence and towards relying heavily on me during the last two weeks of the semester, not an inability

to appreciate the experience.

As for me, if it had not been for this special day, I might have never had a chance to learn what my Math 010 students were capable of accomplishing. I might have been left with the impression that telling them what to do and how to do it step by step is the only way to go. Now I know better. I know that there is a lot of untapped potential even in the weakest students, and that the challenge is to figure out how to tap into that potential. I know that there will be successes down the way and there will be failures, but as the saying goes: "Only he who takes the road may conquer it."

A postscript. All but two students in that section of Math 010 passed the Compass test and received CUNY certification in pre-algebra. Only about half, however, managed to pass the more difficult departmental final. Although this result fell short of my hopes, I don't know if it necessarily compares badly with the results of other 010 classes. In any case, I don't think that test scores reflect the full spectrum of student learning. I saw growth in my students that was not captured by these scores: emerging interest in what mathematics is and why people do it, diminished fear when facing a math problem, rudiments of creativity, and improved problem solving habits. One semester may not have been enough for these gains to translate into satisfactory performance for all students, but I would like to believe that some of the seeds planted that semester will germinate in the future. I am heartened by the fact that some of my students have appreciated the experience and told me at the end of the semester that, for the first time in their lives, they felt that mathematics made some sense and was worth learning.

Encouraging our Math 010 students to take their first critical steps in exploring mathematics and serving as their guides in this risky endeavor is probably the best a Math 010 teacher can accomplish in one semester. We can only hope that their future teachers will pick up the baton and lead them further down that path.

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Teaching Drawing in a Liberal Arts Environment

Simon Carr
Music and Art

This paper has two goals. First, it argues for the place of art instruction, specifically drawing, in the liberal arts curriculum and shows that the specific organizational strategies of learning to draw are beneficial to all areas of study. The second objective is to give an overview of drawing instruction at BMCC, in particular, how it is one of the disciplines used as the basis of the new Multimedia Major in the Music and Art Department.

For many students at BMCC, the required two-credit art course is considered at worst a chore, but at best a chance for an "easy A", as many students, and even some faculty have described it. For the purposes of this essay, before describing exactly what happens in the first few sessions of a beginning drawing class, Art 301, I think it would be helpful to clear up some misconceptions. The purpose of an art course for a non-art major is not simply "exposure to art". While a drawing course can and should include visits to museums, galleries and art related websites, the real discipline of art instruction is often lost in the critical discourse that surrounds the art world. A drawing course, like the one offered at BMCC at the beginning level, should be treated to the same respect for its own inherent discipline and value to the student as an entry-level course to any of the other disciplines.

The complication for most academics, as opposed to artists, is seeing drawing at all. Drawing's mix of hand and mind, manual skill and intellectual probity may often seem closer to the athletic department than to say, a philosophy course. First, the analogy to sports is a good one. The discipline and stamina of the sports students who have come through my classes are to be admired. Second, though, this paper will insist that the other half of the drawing process, the intellectual organization, the literal visual intelligence that works with the hand, the "eye", if you will, shares fundamental organizational tactics with all the humanities disciplines, and in fact, I will argue, it is in many ways the purest form of the intellectual problem solving abilities so central to the liberal arts education. First let's try and clarify what happens in the first few studio sessions of a Drawing I class.

In 1665 the French painter, Nicholas Poussin, a long-time resident of Rome, and in his time the embodiment of the philosopher/artist, defined painting in a letter to his friend and patron, Paul de Freart and Sieur de Chantelou, "It is an imitation made on a surface with lines and colour, of everything under the sun. Its end is to please."[1] What a magnificent ambition. Poussin assumes, as someone in the 17th century might, that the world of experience is knowable and that knowledge can be expressed in the idea, organization, and presentation of a work of art. The final profound revelation for any artist (of his time) would be the equation of this process with an insight into the theological, the divinity reached through the investigation of phenomena, but that is out of the area covered by this paper, and we will pass over it in silence.

My purpose here, after many years of teaching drawing, both to beginners and advanced students, is to lay open the basic lines of thought inherent in the making of a representational image from observation. This by definition excludes much of what has passed as art since the middle of the twentieth century, yet the study and craft of image making from observation continues to thrive, as witnessed by the outpouring of texts and reference works that cross a drawing teacher's desk. (For a sampling, see the "References" list at the end of this article.)

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[1] Holt, Elizabeth G. A Documentary History of Art Vol.ii Doubleday Anchor 1947, 1957 pg. 158. For the 17th century French "C'est une Imitation faicte auec lignes et couleurs en quelque superficie de tout ce qui se voit dessoubs le Soliel. Sa fin est la Delectation" see Anthony Blunt's still valuable Nicholas Poussin (1967), available in a revised edition from Pallas Athene Books, London.

In an era when image making, reproducing something seen, has been apparently reduced to pushing a button, the rigors of learning to draw would seem paradoxical. One of the first anomalies to be discovered by a beginning drawing student at BMCC would be the unusual idea of staring for almost two hours at a group of objects that are not moving. Though the instructor assures them that this exciting process will result in "seeing" in an entirely new way, the average student, nurtured on moving images that cater to every whim, and require only slack-jawed focusing, will be excused for their confusion.

The issue then is exactly what is being seen. In other words, the instructor is indicating that an ACTIVE method of seeing will result in a new sense of the thing seen. This technique, apparently new to the student, requires an intellectual framework. If we are to draw "what we see" definitions and limits must be given. The student begins to realize consciously the intellectual process of organization and filtering that has been a part of his consciousness of seeing all along. In this first step, for example, by reducing the drawing technique to contour line, using a limited group of objects on a table in front of the student, and limiting the drawing to those objects, the basic organizational principles of intellectual activity are revealed.

By making choices among the infinite possibilities before him, the student focuses on a specific problem outlined by the instructor. To solve the problem, that of making an image of objects seen, the student must follow a rational series of steps to succeed. He must first decide what is to be represented, then place them on the page to make the best effect in displaying the object (composition). The objects then need to be sketched out, i.e. placed as simple forms in relative position to each other, (noting their height, width and shape), then finally comes the stage of closer rendering, the process by which details are recognized and represented. So, surprisingly, the first step for the beginning drawing student has nothing to do with the ephemeral idea of "natural talent" and even less to do with the vagaries of art theory, but rather, it is a clear lesson in organizational problem solving, a process well known to all the academic disciplines, but here, surely, stripped to its most essential and revealing.

The problem is representation of a thing seen. The tools are contour line (outline), and a pencil and eraser. The activity is powerfully intellectual in its focus on clarity of priorities and a clear goal, the drawing (representation) of a seen group of objects. That a room of 22 students is looking at the same objects, from different points of view, heightens the sense of a commonly accepted representation for objects we all agree we see on the table. Slowly, the student strips away layers of confusing thought, divergent issues, and self-defeating expectations; most commonly, "Will it look like a photograph?" (By the way, debunking photography as the standard for "how the world looks" is one of the great pleasures of teaching drawing). Photography's insidious claim to visual authority is both untrue and a dramatic limiting of experience. The initial drawings produced in a class, like the one outlined above, prove that visual experience as an active searching in the form of drawing claims a greater authenticity than the passive process of the "snapshot." Again, though this is not the place to argue this, but perhaps the subject of another paper.

Again we return to the quote from Nicholas Poussin. His interesting emphasis, after describing image making with line and color, qualifies this process to include "everything under the sun." What can and cannot be seen is of course the next step in a drawing. After placing the basic shapes on the page, the next step is to be clear about what cannot be seen, the areas of objects that overlap, and the backs of objects that cannot be seen, yet create the volume of a form in light and shade.

At this stage in drawing, one begins to question the full experience of an object; how is the "objectness" that we are trying to represent informed by other senses than sight, in particular touch? How can that be represented in line and value? The full material weight

and density of the object now come into focus. If the first step of drawing is intellectual organization, even a sense of abstraction from the object, the second step brings us into dramatic sensual contact with the object before us. The process of research, organization and discovery is repeated with each drawing, and leads us to Poussin's final comment, "Its end is to please."[2] This result will come as no surprise to those involved in academic research. While I would ultimately put Poussin's pleasure above and beyond the triumphs of a Drawing I class, again and again, I have seen the triumphant expressions of students who were sure that "drawing" was something impossible for them, achieve representation in a way that surprises and delights them.

Representation, then, takes on meaning, separate from the idea of "reproduction," as in photography. The intellectual power of this step is clearly felt as students now perceive a world of media, advertising, signage, videos, all of which are consciously created images, drawings, designs, created by a designer, like themselves. The media world, for example, becomes accessible as a series of design decisions, some good, others bad, but the student now has a lever with which to judge and participate in these decisions. (See the discussion below on the Multimedia major at BMCC).

Once the fundamentals of drawing become clear, the skills and understanding of the student open the way to many upper level art courses at BMCC, and two upper level drawing courses in particular. Drawing II, Art 302, takes these explorations into color. Using color in the context of working from observation is a discussion in itself involving practical knowledge of color theory and its practical relation to representation. BMCC also offers "Life Drawing" levels 1 and 2. The Life Drawing course, Art 164, is very popular with students interested in rendering the human body; it involves basic drawing skills and requires the developing of an understanding of skeletal and basic muscular anatomy. These are the kinds of drawings all art and design schools are looking for in transfer portfolios, as well as being a necessary skill for those moving on the animation, fashion and design.

This brings us to the second part of the paper. BMCC's offering of a Multimedia Major, co-sponsored by the Music and Art, Computer Information Systems, and Speech Communication and Theatre Arts Departments, is only a few years old; yet its presence, along with the faculty brought in to teach the new influx of students, has dramatically changed art class offerings at BMCC and continues to do so. What in the past may have been an "art appreciation" studio course, is now seen in the light of a professional level program, training students for employment in visual arts related fields, like web design, graphic art, fashion design, illustration. Many of our students come to BMCC to receive their Associates degree and then move on to major in a design school, like Pratt Institute, Parsons School of Design, School of Visual Arts, and especially, the well known and industry respected programs at the Fashion Institute of Technology (SUNY). Many students move immediately into the industry. These new students are not dazzled by the art world buzzwords, like "expression" or "creativity," but they are interested in the realities of skill and judgment, learning and decision-making that will be at the core of their chosen careers. Students complete general education requirements, a core group of program requirements and a specialization in one of three areas, Multimedia Art and Design, Programming, or Video Production. Along with these technical courses comes a series of required studio courses, like drawing, painting, sculpture and design. Students are encouraged to become proficient in a specific studio area.

I hope this paper serves notice to those in the college who may not be aware of it; the art department at BMCC is becoming increasingly a career-training department and

[2] For Blunt's fascinating explanation of the term "delectation" here translated as "to please", see Blunt, "Nicholas Poussin" pg 354 f

can no longer be seen as an appendage of more academic fields. The rigor implied in this new major has an effect on both students and faculty. Students are attracted by our program, and they come to the school with skills already developing and an expectation of serious, informed academic instruction. Faculty, both full-time and adjuncts, are increasingly drawn from those who have or continue to teach in the major design schools in our area. The first half of the MMA program, the training in the computer based art and design programs that are the industry standard, has begun with major investments in facilities and faculty. Students, by their second year, are already working in industry, through the MMA internship program. Enthusiasm among students has fueled the creation and growth of a Multi-Media Club and a Life Drawing Club. All of these exciting developments rest on fundamental principles, both in the computer lab and in the art studio. With appreciation for the excellent work of those teaching the computer and design side of the MMA program, drawing is now a fundamental building block of the MMA major. Nevertheless, the adjustment continues to be difficult for some staff and faculty.

The purpose of this paper is to raise the issue of the legitimacy of drawing as a discipline in a liberal arts model and also to see its value as a basic building block in the career-oriented Multi Media program. I hope the next time faculty members visit the first floor halls at BMCC and see the art work of our students displayed there, they see it as part of this exciting development in the full range of academic possibilities BMCC offers its students.

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Many thanks to the Rivington Street Drawing Group

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In addition the anatomic works of Vesalius and Albinus, two of the greatest anatomists of the western tradition are available from Dover books.

Community Based Research and Community Colleges–More than a Common Word

Brahmadeo Dewprashad
Science

The love for food and not science was what got me started in research. As an undergraduate, I spent the better part of a year on a research project trying to increase the protein content of the black-eye pea. I was not paid for the work and, in fact, I spent some of my own hard-earned money in pursuit of the project. I did it for two reasons. First, black-eye peas were an integral part of my diet; and second, I lived in a community where protein malnutrition was a glaring reality of life. What I engaged in was community-based research, research developed and conducted in the service of unfulfilled community needs. It is my personal belief that research that seeks to answer a question that a student has or to solve a problem that a student has experience of is one that is likely to motivate students to pursue it relentlessly. Scientific research is very challenging and more so in a community college. It is my personal belief and experience that participation in community-based research can be a valuable, satisfying, and practical educational experience for community college students and faculty.

There is consensus among educators that undergraduate research is a valuable learning experience for students.[1–5] How best to implement this depends on the institution. At research-intensive institutions, faculty focus is on research. Each faculty member is likely to have a research group comprising post-doctoral assistants and graduate students. In addition, there is institutional support in the form of laboratory space and salaries to technicians to operate and maintain necessary equipment. Thus, faculty can mentor undergraduates without too much additional effort. These students can work on portions of ongoing projects, and direct laboratory supervision can be done by a post-doc or graduate student, with the faculty meeting with the student periodically to review progress and plan new work. Faculty may have specific research interests and specialization, and their projects usually pertain to one of these. Students work on projects that best interest them from amongst those of interest to the faculty.

At teaching-centered institutions, such as community colleges, the picture is quite different. Mentoring a student in undergraduate research requires faculty to: (a) find a project of interest to both mentee and faculty that can be done with the limited equipment available; (b) schedule research times when there is no teaching in the lab and when both the mentor and mentee are free, as the mentor is required to be available in the lab at all times; (c) find funds for purchase of chemicals and supplies. Consequently, mentoring undergraduate students in research at a teaching-centered two-year institution can be quite a challenge.

Many of the requirements are serious constraints with which I struggle every semester. However, I work very hard at choosing projects that are likely to interest students and keep them motivated to stick with the project. I have been able to mentor several students each semester. Most of them complete their projects; some have made presentations at regional and national meetings and a pair of SPEP students won the second prize at a state competition. In the following paragraphs, I would like to share some of my experiences in choosing research projects.

The first student I mentored was familiar with the fact that meat cooked in *casareep*

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[5] Halstead, J. A. *J. Chem. Educ.* 1997, 74, 1390–1391.

(a sauce made from cassava or yucca) has an extended shelf life. *Casareep* is indigenous to Guyana, the country from where the student migrated. I suggested that we investigate whether the sauce was antibacterial. I did not have the necessary expertise to supervise her on the microbiological aspects of the project, but I was lucky to have Prof. Goldberg agree to supervise her on those aspects of the project. The student really took to the project; she bought all the meat and casareep in addition to doing the scientific work. She did excellent work and found that the sauce was indeed antibacterial. She made excellent presentations of her work both regionally and nationally. Her exploratory work later led to a successful application for a PSC-CUNY grant with Prof. Hendrix as co-PI. The research project was continued with other students and now it is providing us with leads to potentially new antibacterial agent(s). In addition, we are preparing a research paper for submission to a peer-reviewed journal describing the results of this project.

Another student who had emigrated from Pakistan once asked me why when Henna is applied to the skin, its color changes. Henna is used as a body decoration in many Eastern countries and in many immigrant communities in New York City. I did not know the answer. So, I looked up the literature and found the structure of the dye present, but there was no published procedure for its extraction. I suggested to the student that we develop a method to extract the dye and investigate why its color changes. During one winter intercession, we worked and developed an extraction procedure and found that the color change is reversible and-pH dependent due to a reversible loss of a proton and the resultant shifting of a double bond. In time, the project was continued with another student (with an interest in cosmetics) and an undergraduate lab was developed to make concrete an abstract concept in organic chemistry. Organic chemistry theory can be used to explain the observed color change. The student presented her research at a regional conference and her abstract was accepted for presentation at a national scientific meeting. The procedure developed is being used at another college, and I am in the process of preparing a manuscript based on the work for submission to a peer-reviewed journal.

Another student got involved in a project out of personal frustration. She was a student who would always come to the board to solve problems and each time would express frustration at the inability of the available cleaning solutions to do an effective job on all the different colors. I suggested she work on developing a more effective cleaning solution. She worked diligently and found that different colors needed different formulations. In addition, she was able to develop several solutions that were more effective and safer than the commercially available ones. She got honors credit for her project and the committee members were most impressed by her work. Althought she transferred to a senior college, she continues to work with me and a senior college mentor.

A pair of high school students, children of immigrants, indicated that they had a love for fruits and were curious if some of the more exotic tropical fruits that they bought in Chinatown had Vitamin C levels comparable to that in oranges. They undertook a study and spent many weekends working on it. They found that many of the fruits had comparable, and in some cases, higher levels of Vitamin C than oranges. They gave a superb presentation that won the 2nd prize at the 6th Annual STEP Student Conference held in Albany, NY in 2004.

A fourth example of mentoring community-based research involved a student who had an interest in the nutritional value of the diets of immigrants from the Dominican Republic, as her parents migrated from there. The student investigated the fat content and the levels of saturated and unsaturated fats in typical meals. She did excellent work and developed a strong interest in healthcare issues in her community. She transferred to a senior college and she plans to do professional studies in healthcare. She indicated that the project was a motivating factor in her future pursuits.

These are a few examples of the community-based research projects that I have

supervised here at BMCC. What the students and I engaged in was community-based research, aimed at fulfilling unmet community needs. It is an increasingly popular experiential opportunity for undergraduates in the sciences.[6] The literature stresses the importance of learning real-world applications of a discipline, highlighting the relevance of science, and working on real problems. Also, it indicates that the greatest single benefit of community-based research is probably showing students that what scientists do has a direct relevance for and impact on the larger community that they daily live in.[7] For faculty, community-based research provides a connection to the local community, an opportunity to become involved and invested in the community which our students come from. The service and outreach component of community-based research essentially provides tremendous personal rewards. In addition, such efforts are also likely to enhance the visibility and image of the institution in the communities from which we recruit students.

I feel that there is a natural fit between community colleges and community-based research. Fundamental research thrives best in a research-intensive environment; however, community colleges do not have such an environment. Community-based research can thrive in an institution with strong linkages to its communities. Such linkages are the strengths of community colleges and can be leveraged to develop programs in community-based research. The latter is no less of a scientific endeavor than fundamental research. However, particular attention must be paid to designing meaningful research projects that require due scientific rigor but can be accomplished with limited time and instrumentation. The latter two factors are the realities of community college life, but they do not have to be barriers to undergraduate research.

[6] Doyle, Michael P., Ed. *Academic Excellence: The Sourcebook, A Study on the Role of Research in the Physical Sciences at Undergraduate Institutions;* Research Corporation: Tucson, AZ, 2000.

[7] *A Survey on Attitudes towards Community-Based Research.* Council on Undergraduate Research: Washington, DC, 2004; www.cur.org/pdf/CUR2004CBR_SurveyResult.pdf

Teaching Statistics via Student Research Internships[1,2,3]

Nkechi Agwu, Piotr Bialas, Brahmadeo Dewprashad, Judy Eng, Louise Greene, Monique Jean Louis and Barbara Tacinelli

1. Introduction

In the 2004-2005 academic year, the authors engaged in an interdisciplinary research study, "An Investigation Into the Patterns of Uses and Effects of Self-Medication in Caribbean Immigrant Communities" at the Borough of Manhattan Community College (BMCC), City University of New York (CUNY), funded by a CUNY Community Collaborative Incentive Research Grant. The aim of this study was to determine the pattern and extent of self-medication in Caribbean immigrant communities in New York City (NYC). To accomplish this goal, a survey was developed and conducted on 339 self-identified non-minor persons of Caribbean heritage living or working in NYC about their self-medication practices. In addition, six community-based medical doctors were interviewed on their knowledge of their patients' self-medication practices. A convenience sampling method was employed in all data collection activities. The results of the survey and the doctors' interviews were used to compile a checklist of alternative medications. Medicines that were not prescribed by medical practitioners and those that were sold over the counter but not United States Food and Drug Administration (US FDA) approved were considered as alternative medications. Some of the medications on this checklist were purchased and chemical analyses were conducted on the medications purchased. This project was a collaborative endeavor between faculty and students from the Mathematics, Science, and Nursing Departments of BMCC/CUNY. The study involved teaching statistics to students through research internships. It also involved French and Spanish translation services provided by a faculty member from the Mathematics Department and another faculty member from the Modern Languages Department.

2. Opportunities and Processes Leading to the Interdepartmental Collaboration

This project evolved as a consequence of the following existing CUNY-wide or local BMCC, CUNY, programs and initiatives:

2.1. The CUNY Community College Collaborative Incentive Research Grant

In Spring 2004, the CUNY Office of Academic Affairs announced a new program to support the research efforts of faculty at the Community Colleges and to encourage collaborations with faculty within and across CUNY campuses. The Principal Investigators (Nkechi Agwu – Mathematics, Brahmadeo Dewprashad – Science and Barbara Tacinelli – Nursing) responded to this opportunity by submitting the proposal for this project that was selected for grant funding under this program.

2.1.1. The Project Kaleidoscope (PKAL) Leadership Program at BMCC, CUNY

This program served as the impetus for bringing together the mathematics and science

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[1] 2000 *Mathematics Subject Classification*. Primary 97D02; Secondary 92E02, 92C50.

[2] This project was supported by the CUNY Community College Collaborative Incentive Research Grant Program and the following programs/offices at BMCC: the Nursing Program, the Collegiate Science and Technology Entry Program (CSTEP), the Computer Science Engineering and Mathematics Scholarship Program (CSEMS), the Louis Stokes Alliance for Minority Participation Program (LSAMP), the Minority Science Engineering Improvement Program (MSEIP), the Office of Instructional Technology, the Grants and Development Office, the Office of Academic Affairs and the Project Kaleidoscope Leadership Program.

[3] French and Spanish translation services for this project were provided by the following faculty members: Jean Richard (Mathematics) and Nidia Pulles-Linares (Modern Languages).

Principal Investigators (PI's) for the grant that funded this study. The PKAL leadership group organizes faculty development seminars and holds monthly meetings for faculty from the science, mathematics, computer information systems, and social science departments to discuss science, technology, engineering and mathematics (STEM) initiatives at BMCC geared towards promoting "Science for All" students.

2.2. The Nursing 112 Community-based Internship Requirement

Nursing 112 provides nursing majors at BMCC, CUNY, with an introduction to the bio-psycho-social and cultural factors that influence the nursing care of any patient or client who needs minimum assistance in the maintenance of health. The community-based internship requirement of this course presented an ideal opportunity to involve the Nursing Department in this project given that their faculty members were not participating in the PKAL Leadership Program, and that this project directly relates to socio-cultural factors that may have influence on nursing care.

2.3. Various STEM Undergraduate Research Programs at BMCC

Various STEM undergraduate research programs at BMCC, viz., the Collegiate Science and Technology Entry Program (CSTEP), the Computer Science Engineering and Mathematics Scholarship Program (CSEMS), the Louis Stokes Alliance for Minority Participation Program (LSAMP), the Minority Science Engineering Improvement Program (MSEIP) require participating students to engage in research internships under the mentorship of a STEM faculty member. These programs provided opportunities to recruit students to engage in this study under the mentorship of one or more of the collaborating faculty members and high school teachers.

3. Internships

3.1. The Nursing 112 Internships

A questionnaire was developed in English for the purpose of collecting data on the pattern and extent of self-medication in Caribbean immigrant communities in NYC, together with a participant informed consent form and an interviewer informed consent form. Given that the language of business communication in some Caribbean countries is Spanish or French, it was perceived that there might be potential survey participants who could not understand English. Coupled with the fact that some of the NUR 112 students indicated fluency in either of these two languages, Spanish and French translations of the questionnaire and participant informed consent form were made with assistance from two other BMCC faculty members (one from the Modern Languages Department and another from the Mathematics Department) for potential survey participants that did not understand English but understood one of these two languages. However, the translated versions of the questionnaire and participant informed consent form were not used since all the surveyed participants understood English.

This questionnaire was administered through face-to-face interviews with 339 non-minor persons of Caribbean heritage living or working in NYC. The interviews were conducted by 120 students enrolled in three sections of NUR 112 as their community-based internship requirement for this course, during the period of March 2005 through May 2005. Each NUR 112 student registered in the participating sections of this course was expected to interview three subjects. Student interviewers were supposed to follow the interview instructions and guidelines scrupulously. They were supposed to index their subjects' forms according to previously established rules. The questionnaire and participant informed consent form for each subject was placed in an envelope that was marked with the name of the interviewer. The student interviewers returned the envelopes with the completed questionnaires for the interviews they conducted to the instructor of their NUR 112 section, who in turn returned them to the PI's for further evaluation. It was envisioned that this type of involvement would develop the students' patient-interview skills.

The three instructors for the three NUR 112 sections coordinated the logistics of the interview process. They selected sites highly populated with people of Caribbean heritage throughout the boroughs of NYC, for their students to conduct the interviews for this project. Some of the sites selected were churches and community centers. They obtained permission from the administrators at these sites for their students to conduct the interviews in rooms that guaranteed privacy for the participants during their interview. They disseminated information to their students about the interview locations, dates, times and directions to these locations, and also escorted them to these locations.

The subjects were selected based on voluntary participation and self-identification as belonging to the target population. This questionnaire sought answers to the frequency of usage of alternative medications, the names of such medications, the conditions for which they are used, the basis for their usage, and the subject's perception of the effectiveness and side effects of the medication.

The student interviewers and all other personnel engaged in this project (PIs, research associates and research assistants) completed CUNY's approved training program for the protection of human subjects in research (see www.rfcuny.org/ResConduct/CBT) and received a certificate upon completion to indicate that they were employable for any CUNY research study involving human subjects. This was a requirement stipulated by the BMCC, CUNY, Institutional Review Board (IRB). In addition, the student interviewers were trained and practiced in interview techniques within a half-day workshop conducted at BMCC, CUNY in February 2005. They were provided with instructions and guidelines for conducting interviews with participants. Last, the interviewers were required to sign an interviewer informed consent form.

3.2. Internships within Various Undergraduate Research Programs

Statistical Package for Social Sciences (SPSS) software was used to create a database for participant responses to the questionnaire. The participants' responses to the questionnaire were entered into the database and analyzed with the support of student research interns from the following BMCC, undergraduate research programs, viz., CSTEP, MSEIP, LSAMP and CSEMS. These student interns were not required to have a prerequisite background in introductory statistics nor prior experience in undergraduate research.

Based on the participants' responses to the questionnaire, a checklist of alternative medications was developed. The popularity of these medications was ranked, the reasons for use by participants were identified together with their knowledge about the efficacy of these medications.

Majority of the alternative medications that participants reported to have used in the past or are currently being used by them were critically evaluated. Medications selected were those that were available in multiple groceries in Caribbean immigrant communities and whose analysis would provide information that would lead to new knowledge about them. Labels (where available) of the most frequently used products were inspected and their label claims critically evaluated. The pharmacology of each of the active ingredients was researched from the literature and a critical evaluation was done in order to determine whether the label claims (and the purported usage of these medications) were justified. Students identified in the undergraduate research program, who were taking or who had taken CHE 230 - *Organic Chemistry I,* and CHE 240 - *Organic Chemistry II* at BMCC, CUNY, were involved in the analysis. This was done in order to provide them with training in undergraduate science research.

4. Curriculum Materials for Teaching Introductory Statistics

The following materials developed and/or used for this study served as curriculum materials for teaching about survey design and methodology, ethical practices for conducting statistical studies, data collection, organization and analysis, and reading graphs, tables

and charts to students enrolled in one section of a 2005 Summer I MAT 150 – *Introduction to Statistics* course at BMCC, CUNY.

4.1. Required Resources and Materials

The resources and materials used for the project included the CUNY Training Program for the protection of human subjects in research, the questionnaire, the handout with instructions and guidelines for interviewing participants, and the participant and interviewer informed consent forms.

Since the NUR 112 students who engaged in this project developed positive attitudes toward the research process and ethical considerations associated with conducting a study involving human subjects through the training process and use of the above-mentioned materials, this was replicated with students in one section of a 2005 Summer I MAT 150 – Introduction to Statistics – course as part of the coursework. The MAT 150 students underwent formal training within the CUNY training program for the protection of human subjects in research and they had to write a graded report on ethical considerations for the use of human subjects in research. By virtue of being formally trained through this program, each of the MAT 150 and NUR 112 students became certified and therefore employable on CUNY research studies involving human subjects.

The questionnaire, the handout with instructions and guidelines for interviewing participants, and the participant and interviewer-informed consent forms were used to teach students about survey/questionnaire development and interviewing techniques and ethical issues related to conducting interviews. In addition, the questionnaire was used to teach students about various types of data, coding schemes for categorical data, and methods of data analyses.

4.2. Two Examples of Graphical Displays with Relevant Statistical Summaries from the Survey

Example I: A qualitative variable (Medication Type) with seven levels

The example was selected to teach students how to code and analyze a qualitative variable using some statistical software. Students were provided with the raw data for this example. They had to use the raw data to create frequency, percentage frequency and cumulative frequency tables and an appropriate graphical presentation of the data. They had to write a brief report summarizing the statistics in their frequency, percentage frequency and cumulative frequency tables and in their graphical display.

Question - *Please indicate any medication (including herbs or alternative medicines) that you are taking or have taken in the past year that was not prescribed by a medical doctor?*

Table 1: Medication Type

Medication Type	Frequency	Percent	Cumulative Percent
Tea	87	26.2	26.2
Prescription medication	6	1.8	28.0
Non-herbal OTC	36	10.8	38.9
Bitters	31	9.3	48.2
Laxative	8	2.4	50.6
Non-Caribbean alternative medication	26	7.8	58.4
Miscellaneous	138	41.6	100.0
Total	332	100.0	

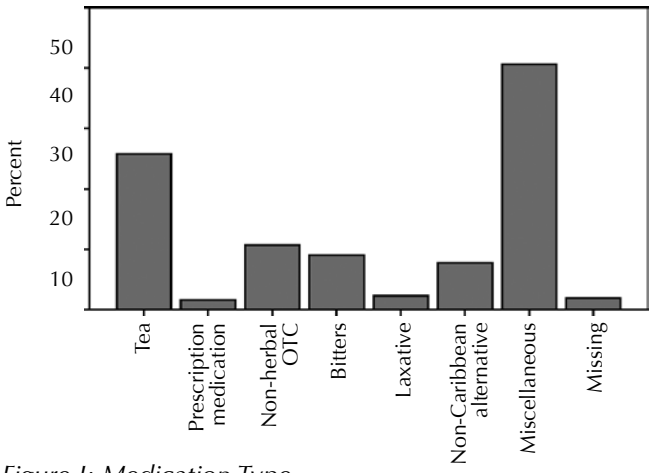

Figure I: Medication Type

Example II: A numerical variable (Cost of Medication)
This example was selected to teach students how to analyze a quantitative variable. Students were provided with the raw data for this example. They had to use the raw data to obtain a summary statistics and create an appropriate graphical presentation. They had to write a brief report discussing the summary statistics for this example.

Question: What is the cost of this medication?

Table II: Cost of medication

Statistic	Statistic's Value
Mean	11.2606
Median	5.0000
Variance	540.907
Std. Deviation	23.25741
Minimum	0.00
Maximum	210.00
Range	210.00
Interquartile Range	10.0000

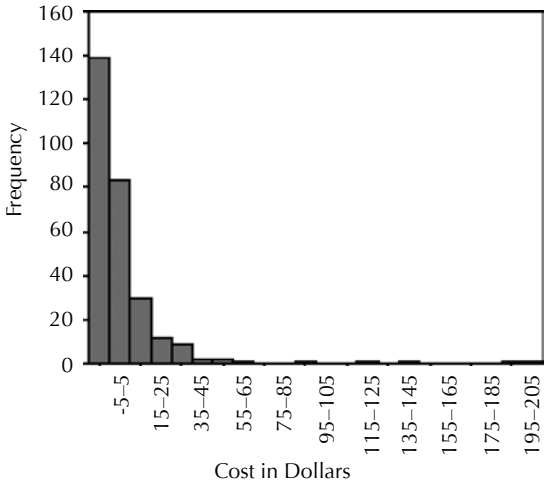

Figure 2: Cost of Medication

5. Educational Benefits for Students

5.1. Benefits for Nursing 112 students

One hundred and twenty NUR 112 students were involved as student interviewers in this research project as part of their community-based learning experiences. The students developed positive attitudes toward the research process and ethical considerations associated with conducting a study involving human subjects. They increased their knowledge about self-medication with over-the-counter (OTC) agents (e.g. medicines and nutritional supplements) and home herbal remedies, and the potential for adverse drug interactions with prescribed medications. Integrating a research experience into a community-based learning experience proved to be an effective learning strategy to teach research and nursing communication skills, while also helping to promote the health and well being of individuals in a community.

This community research project allowed these nursing students to apply their readings and class discussions of communication, cultural diversity, ethics, and legal aspects of confidentiality to their lived experiences with individuals in Caribbean communities, thereby enriching and affirming the classroom theory through first-hand application. The experiences provided students with an opportunity to learn the basics of research, implement communication skills with increased confidence, and meet course learning outcomes related to community concepts and the role of the nurse in the community. These experiences translated to increased awareness related to the health of a community and the need for advocacy by nurses.

Student feedback was extremely positive. Students identified increased confidence in communication. Student comments reflected an appreciation for this community learning experience in allowing them to implement their knowledge and skill in the "real world" in a short time frame. Participation as interviewers in this community research project gave students a better understanding of the functions of the professional nurse in community settings, an expected outcome of this community learning experience.

5.2. Benefits for Undergraduate Research Interns

The students who worked on the raw data preparation and analyses phases of the project were instructed on how to code different categorical variables, how to enter categorical variables' values into a file, how to correct spelling errors, and how to clean data (remove cases that remained incomplete, partially incomplete and/or illegible). They were instructed on how to label each variable with concise and meaningful information for further evaluative purposes. They were also instructed on selected SPSS procedures involving frequency analysis and graphical analysis of the data, viz., how to construct and format frequency distribution tables in the SPSS file and how to create/format various graphical displays of numerical and categorical data. In addition, they were instructed on how to transfer different SPSS displays into a Microsoft Word file while writing a report about the study. Last, they participated in drafting and proof reading of the project report and the accompanying Power Point presentation. The fact that these student research interns were not required to have a pre-requisite background in introductory statistics and/or have prior undergraduate research experience provides an ideal opportunity for project-based adaptation to the high school learning environment. The CSTEP intern working on this project was selected by the CSTEP committee in Fall 2005 to present his work at the national CSTEP conference in April 2006. He was also selected to present his work at the Mathematical Association of America (MAA) Undergraduate Research Conference at Manhattan College in March 2006.

The research interns who engaged in the chemical analysis of some of the alternative medications were provided with hands-on exposure to isolation and characterization of the active constituents of medications. The techniques that were used built upon laboratory skills and theoretical concepts learned in CHE 230 - Organic Chemistry I and CHE 240 - Organic Chemistry II. It also provided students with real-life applications of

organic and general chemistry. The students involved indicated that this experience motivated them to pursue science research careers.

6. Conclusion

The findings of this study revealed some alternative medications that were commonly used by those surveyed to treat many severe medical conditions for which they have not been proven to be effective. The pharmacology of some of the selected alternative medications showed toxicalities and contra-indications associated with their use. As such, their use might directly lead to adverse health risks. The survey participants indicated that elders, family, and friends propagated the use of alternative medications. Active community education may be needed to advice on the relative merits of such medications. Education of community health care workers on such practices is also recommended. The participation of students in various aspects of this study and the positive feedback received about their participation, together with the use of project materials for teaching introductory-level statistics emphasize the significant educational value of student engagement in scientific research and in teaching through real-life applications. On the whole, this study provides a framework for future research endeavors related to the patterns of use and the effects of self-medication in Caribbean immigrant communities and serves as one model for engaging students and teachers in interdisciplinary science research.

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FAC, MAC, and TAC: Popular Culture Across the Curriculum

Jack Estes
Social Sciences and Human Services

Ave Maria Again
(With Apologies to Frank O'Hara)
Mothers of America
make your kids watch TV!
Force them to sit down in front of that set
and pay attention to *Sesame Street*
rather than their own
street, and you
can drink coffee and talk on your cellphone
without worry that they're outside
dropping Mr. Owens' cat
from the apartment rooftop
to see if it lands on its feet.
They'll stay off their own feet
and out from under yours,
and they'll appreciate you
for their educations,
the ones that count,
the ones their classmates *admire*
having to do with MTV and hair styles
and CNN's "Hollywood Minute."

They can learn about sex without getting pregnant or AIDS,
and about brand names of blue jeans,
about the latest cars and the joys of beer,
about what to wear and how to wear it,
about everything except you
and your own private needs and desires.
Mothers of America
listen to me:
Make your children watch tv.
But here's the rub:
Watch it *with* them.
Ask them what's BEHIND that Toyota,
what's being sold along with
that Coke, those Nikes, that pop star.
Ask them how tv does this, and why.
Make sure they know.
O Mothers of America -
if you don't let them watch,
your kids will do it anyway, away from home,
and they'll find *new* mothers
inside those boxes,
mothers who *really* care
about their children.

In sociology, using popular culture to illustrate terms and concepts seems to be natural. It also fits with the concept, as practiced in some colleges in the CUNY system, of *Culturally Relevant Curriculum (CRC)*. According to Jonathan Deutsch of Queensborough Community College, "CRC scholars argue that the key to successful teaching is in the use of pertinent materials and discourse around the students' shared cultural experiences." Since so much of what the students "share" culturally is disseminated through the popular culture, it seems natural to try to incorporate popular culture into one's courses.

Should I spend the next two paragraphs arguing for this approach? What seems to be so obvious to me may in fact be less than obvious to you, the reader of this article. You may be wondering why anyone would stoop so low as to try to deconstruct "The Jerry Springer Show" when he or she has Shakespeare or Karl Marx or Susan Sontag to work with. Must we further contaminate the minds of students who already believe that MTV represents the best that our culture can provide? Must we lower ourselves to their levels? Is it appropriate for us to encourage students in their strange concepts of "what matters?"

In a word: Yes.

That said, what kinds of material fit into this category? Each form of popular culture seems to have its hierarchy. Television certainly varies from the above-mentioned Jerry Springer to PBS's Masterpiece Theater, from "American Idol" to "American Experience." Movies, likewise, run the gamut—going from lowbrow offerings such as *Big Momma's House* on to the higher-browed *Syriana* or *Brokeback Mountain*. Most other popular culture artifacts can be seen in a similar light, from video games to card games, from toys and dolls to fashion and food, from sports to comic books.

My argument is that we should try to choose the more "lowbrow" examples, that through those artifacts we can learn more about ourselves than we can through the more serious but less popular ones. We should select Jon Stewart's "The Daily Show," for example, over "Nightline," or "South Park" over "Masterpiece Theater."

The Jungian approach to this topic suggests, in fact, that the creator of popular culture is tapped into the collective unconscious and able to express those values and fears that haunt our society even though we may not recognize them. This artist, more so than the so-called "elite" artist, finds a way to connect images and narratives with what we truly keep hidden deep within us.

The slogan of the Popular Culture Association is: "if it ain't popular, it ain't culture." That works for me. If I want to help students understand what culture is, I want to help them "see" the culture they live in. I want them to examine the shows they really watch, rather than the ones I think they "should" watch. Another line I like to use is, "We don't know who it was discovered water, but we can be fairly certain that it wasn't a fish." It's not easy to see one's culture, particularly since we're so immersed in it and since we have been so immersed in it since we were born. (Here, by the way, is where the diversity of our classrooms can really be helpful. Many immigrant students are able to observe their "new" culture in ways native-born students aren't.)

So, we can start by looking at a TV show such as "CSI" or "Girlfriends" and examine just what values are being espoused by the show. (Studying TV is more easily accomplished than studying movies in a classroom for the simple reason that the TV shows can be shown during a typical class session—being only 22 minutes long for a 30-minute show.) Superficially this question of values is easily answered: the value of law and order in an otherwise chaotic society, the value of romantic love, the value of family, or the value of friendship and trust. Sometimes, though, the question has some not-so-easily answered elements: the value of giving in to a dominant police power to control and preserve our freedoms, the value of science in protecting us, the value of smiling or being nice when we want something from someone else, and the value of learning how to play

the game of lying and deceiving. It is these less obvious, more latent values that need to be identified, and examined.

How are these more latent values revealed in such programs? Certainly, not explicitly. The focus of the class is to study the exchanges made by the characters, including the language and the non-verbal communication—body language, set design, clothing styles—that might reveal latent values. It would also be to examine the ways in which the norms practiced on the program might suggest certain values. What are the subtle ways in which someone is sanctioned—positively or negatively—for behaving a certain way, for giving way to authority or for challenging the prevailing system? They're always there, these norms and sanctions, (although we have to learn to spot them), just as they're always there in our own lives (although, as with observing television programs, they're not always easy to spot).

In a recent classroom showing of "The Cosby Show," we watched Bill get into a contest with his son-in-law and his married son as to which of them is the most romantic. It was a friendly contest, of course, and it overtly illustrated the values associated with a close family and men who love their wives. It also, on a deeper level, illustrated the value of manliness: i.e., a "real man" knows how to please "his woman," and a "real man" is quick to enter into competitive battles with others in order to "prove" his manliness. The norms illustrated revealed the men's beliefs in romantic love, and in their beliefs in the value of competition. As the three of them left the TV room (in Bill Cosby's house, the TV is put away in a separate room rather than being in the living room and dominating the space and, possibly, suggesting that people in his family place high value on such a crude medium), they were discussing the football game they'd just watched. (Yes, real men watch football; the women weren't there.) The youngest son had taken off right after the game in order to be with his girlfriend. As he had said earlier, he wasn't living in "the marriage graveyard" where—because of becoming married—all the joy leaves a relationship. The others, of course, teased him for running over to his girlfriend's so fast; "real men" don't do that. But they also interacted about their own abilities to show how romantic they were.

So many values were communicated in this program, and so many norms were taught: the value of family, of love of one's spouse, of camaraderie among men, of competition, of education, and the norms of how to show love, how to interact (if you're a man) with other men, of how to live with money. Money came up another time when Bill was challenged by his son that he really didn't know how to express his love for his wife without resorting to spending money on her. Bill Cosby is a successful physician in this program, and his wife is an attorney. They do have money, lots of it. But he challenged the idea that he could only show his love by spending money. In the competition he suggested, he insisted that the men limit themselves to only $25 for any gift for their wives.

Money is treated differently in other programs, however. A typical VH1 program is called "Fabulous Lives…," focusing on various ways the rich and famous live. It's meant to be slightly tongue-in-cheek and somewhat satirical, but in fact it emphasizes money, money, money. In a recent program of "Fabulous Lives… Celebrity Religion," the program looked at Christianity, Judaism, and Buddhism, as well as Scientology and Kabbalah. That sounds like material which might avoid being associated with money. On the contrary, the program examined some of the biggest contemporary celebrities and how they practice their religions; and the primary focus was on the millions these celebrities spend to buy diamond-studded crosses and specially blessed belt buckles and bottled water; it also looked at more millions given to religion-related causes. Essentially, the hidden value lesson was that if only YOU became a celebrity, you too could have millions of dollars to spend on your religion, or on the accoutrements representing your religion. One of the lines in the program was, "The bigger your cross, the closer you are to

God." Silly, yes, and actually ridiculed (slightly) during the program. But the subtext is not so silly, because following that statement, the program featured a $7-million cross worn by P. Diddy, and a viewer couldn't help but fantasize about achieving that kind of money. Sometimes what we say may in fact be quite different from the message we project.

As I said, this material is a natural for sociology. And it is pretty easy to adapt to philosophy and psychology, too, or any of the social sciences. In English and humanities classes, also, popular culture material is a natural fit. Can it also be applied to the natural sciences, to math classes, to business, or to nursing? I don't teach in any of those courses, so what can I say? To me, though, familiarizing oneself with popular culture, with the culture of the students, can't help but enable us to more easily connect with our classes. We can do this in a way such as referring to a song or movie as an allusion or metaphor, or we can go further such that we develop an entire class or module around a sporting event (the Olympics, The World Series, The World Cup) or television program.

A "culturally relevant curriculum" asks this of a professor, that he or she try to adapt his or her course to the student, rather than the other way around. Why not? It may mean a professor has to study those students' interests and lives, of course, and that may not be easy. It can, however, become challenging and rewarding. Once music and television and movies are looked at with cultural values in mind, the viewing of them becomes an entirely new experience. I recommend it. Mothers (and fathers) of America, make your children – and their professors – watch TV.

Writing the Social Self: The Use of Student Journals in Introduction to Sociology

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> "The reflexivity of modernity extends into the core of the self. Put in another way, in the context of a post-traditional order, the self becomes a *reflexive project*"
> –Anthony Giddens, *Modernity and Self-Identity*

Introduction

During fall 2005 semester, my first at BMCC, I assigned student journals as part of the course requirements for my classes. My decision to use student journals in my introductory sociology course acknowledged that much of the learning process is part of this reflexive project that Giddens describes. It was also inspired by the sociologist C. Wright Mills' concept of the sociological imagination which he described as the intersection of biography and history. In the journals, I wanted my students to apply this imagination to their own life experiences. In this article, I will describe my experience of assigning these journals, from my rationale to my assessment of the process, both for the student and for myself, and the effectiveness of the assignment itself and how it fits into my overall teaching goals.

Journaling is not new in sociology courses nor is it particularly original, However, using student journals as a teaching tool has been well-documented (see Wagenaar, 1984; Karcher 1988). I have used them myself in my prior teaching experience at a private university and a liberal arts college (where, I must add, I rarely had more than 20 students per section). As I had in the past, I wanted to give my students the opportunity to explore the theories and concepts they were learning about in the informal context of a journal. I found that the journals provided a space for freely expressing ideas and opinions not revealed in class discussion, especially for students who felt intimidated by speaking in class. I felt comfortable incorporating the assignment into my BMCC classes, since the journals would be considered informal and would be "lightly" graded and that they reward diligent students who may not do well on exams.

While I intuitively felt that journals help my students learn sociology, it was my participation in the Writing Across the Curriculum (WAC) workshops that introduced me to the concept of "writing to learn" and led me to examine the student journal assignment more systematically. My teaching method has always employed and stressed the importance of writing, but my introduction to the WAC model provided me with a new framework for evaluating writing assignments. Indeed, the observations here come out of the "action research" component of the workshop in which participants were asked to examine a teaching-related problem, incorporating the WAC perspective. In doing this action research, I wanted to assess whether or not the student journals were a meaningful and effective teaching tool that fulfilled my vision for the course. Additionally, as anyone who has assigned student journals of any kind knows, they can represent a significant time commitment and grading challenge. Are they worth the time, both for the instructor and the student?

The first thing I had to do was really think about my teaching goals and how they related to the journals. My overall goals in the sociology course are similar to most instructors' goals: (a) students will learn about the major perspectives, theories, and substantive areas in the discipline of sociology; (b) the class will improve students' critical thinking, analytic and writing skills, and (c) students will be able to use the concepts they learned in the sociology course to better understand their own lives and the social world around them. The second and third goals are particularly important given that most students are

not likely to pursue further study of sociology, something that may be especially true of the many BMCC students who choose career-oriented majors of study.

The basic pedagogical goal of the journal is to provide a form of low-stakes writing that would improve students' writing and thinking skills by having them write on a regular basis. The journal, ideally, should serve as an elementary form of transactional writing, where they analyze ideas and issues and work through the concepts they learned in class, but it should also serve an expressive function where students can personally reflect on their ideas and think about their own life choices and worldview and what influenced them. If the self is indeed a reflexive project, then the journals could be a place to document the process. In terms of the development of student skills, I wanted the journals to address (in the Piagetian sense) higher order cognitive functioning in which students would start to take ideas and be able to assimilate and accommodate them into their overall body of knowledge (Wagenaar, 1984). Ideally, the writing process should help facilitate the integration of sociological concepts into that existing body of knowledge. The practical goal of the journal (and in having them be graded) is to provide a form of low-stakes writing through which I can reward students who are otherwise uncomfortable with formal writing or class participation. The other practical goal was that the journal was to build towards the sociological autobiography, the formal writing component of the course.

Approaching the Assignment: Structure vs. Autonomy

The main point I stressed to students was that while we would occasionally do in-class journal writing, they were essentially an independent learning tool. The reality is that the more motivated students would keep up with the journals, while the rest might slide and throw their journal entries together before the deadlines. Despite that understanding of how students actually do these kinds of assignments, I wanted to emphasize to my students that they have a role and responsibility in their own learning and that the journals would be what they wanted to make them. This brings me to the constant tension I have in my teaching between providing students with sufficient structure while giving them autonomy in the learning process. By providing clear (and some might say, "obvious") guidelines, am I denying students the opportunity to be creative? In the end, I decided that the journals would be "semi-guided" where I do provide structure and guidelines for those who need it while providing room for students to get creative and make the journals their own.

The assignment I developed was based on the "classic" sociology journal assignment designed and evaluated by Theodore Wagenaar (1984). Students were given two-page guidelines with instructions, journal suggestions, grading criteria and a modeling sample entry to help them start the journals. In addition, in class, I would mention the journals, give additional journal suggestions and occasionally assign in class journal-writing. Below is a small sample of the suggestions they were given:

Journal Entry Suggestions

- Choose an article in the newspaper and write about the differences between how a journalist approaches a topic and how a sociologist would look at the same topic.
- Do you have a friend who comes from a very different culture than you do? Do you and this friend have different ways of looking at American culture? If you do have different views, why do you think that is so?
- Did you or your parents immigrate to the United States? If so, what aspects of American culture does your family or do you most embrace and what aspects of American culture do you find to be most problematic?

- Watch an episode of a reality show and write about sociological concepts you see enacted on these shows. Why do you think people enjoy these programs so much?
- Take a look at a women's fashion magazine and analyze the table of contents or a fashion spread. What do you think they say about women in our society?

I went over the journal assignment in detail during the first week of classes so that students would have a clear understanding of how to write their journals and how I would evaluate them. Most of the students used the suggestions above and a significant minority linked them directly to concepts they learned in the course. At the very least, the suggestions provided them with a starting point for examining their own social contexts.

Grading and Assessment

Ideally, with informal writing, there need not be any formal grading. However, studies point out (see Karcher 1988) that students are more likely to take an assignment "seriously" if it is graded. In addition, as I mentioned earlier, I wanted to reward students who were willing to put time and effort into the journal assignment. I let them know that I would reward them for the volume and content of their writing, and not penalize them for problems with grammar and writing skills. I included this grading schema, which I also explained in class, so that students would know what I was looking for when I graded their journals. I also encouraged students to show me their entries so they would know if they were on the right track.

A: An "A" journal volume-wise will consist of at least 4-5 pages per week of class. It may include observations and critiques based on class readings or discussion. It may also include analysis of news articles, info from websites or television programs or explorations of your own life experiences. I will look for not just a summary of what you read but that you took the next step to analyze and think about a social phenomenon using sociological concepts.

B: A "B" journal will consist of about 3–4 pages per week of class and will include your observations based on class readings and discussions and write-ups from in-class writing exercises. You may have summaries or discussions of outside sources or your life experiences as above but with less analysis and less detail.

C: A "C" journal is one that is "okay" and fulfills the basic requirements for the journals. It consists of about 2 pages for each week of class and may include notes and observations based on class readings and discussions and minimal write-ups based on journal suggestions.

Students who never hand in a journal would receive an *F*. I decided against giving out the *D* grade because it seemed punitive, though some students received the *C*- grade, which had the same effect. The journals were collected twice during the semester, once around mid-semester and again towards the end of the semester. Ideally, there would be more frequent evaluation and collection of journals, but I felt that it was a realistic schedule given the size of my classes and the time involved in the grading.

The WAC literature teaches us that writing-intensive classes need not be overly labor-intensive for the instructor and they even give guidelines for efficiently grading journals. However, I found it difficult to skim and select and I ended up actually reading most of the journals. Needless to say, the grading process as I experienced it was extremely time-consuming. This of course, raises the issue of whether the journals as an assignment were worth this significant time commitment.

Student Learning Outcomes: Was It Worth It?

One of the fundamental questions of this evaluation goes back to a core WAC principle—were my students *writing to learn*? That appeared to be the case for that significant minority of highly motivated students and those who came into the class with good writing skills. For them, the journals were a place to reinforce what they learned in class and from the course materials. There is no way I know of to empirically document whether or not the writing itself caused the cognitive-level effect of facilitating the comprehension and learning of course concepts. Since those students did well in their other assignments, it's impossible to claim causality. For the majority of students, roughly 2/3 of most of my sections, the journals represented little more than busywork, where they either regurgitated the contents of lectures and the text, or even worse, appeared to completely miss the point of the journals and used them as a personal diary (unfortunately, I failed to get permission to reprint excerpts from those). The excerpts below represent the best of what I intended the journals to do. They are thinking and writing about social issues and applying sociological concepts to their life experiences:

> Today we discussed social classes. I never gave it any thought before but now I am wondering what class I belong to? I would say that my parents belong to the working class but they sacrifice and work hard and pay my tuition so that I can move up beyond that.
>
> I don't think that many people truly knew how bad the poverty was in the South until they saw the graphic images of the people affected by Hurricane Katrina. People are surprised that in a country as wealthy as ours that there could be so much poverty in such a big area.
>
> I never knew it before but most of my life I've been seeing the world through the conflict perspective. I've always thought about inequality and who has power and who really doesn't and what's really going on in the world.
>
> All this talk about how increasingly credentialized this country is becoming rings true and stings. I didn't get the job I applied for which means I'm back to business as usual. A two-year degree [or "some college"] just isn't enough anymore...

The above excerpts represent that significant minority of students (20-25% of sections) who received *A's* for their journals and were pleased that their efforts were rewarded in the grading scheme.

Among the students who received *A grade* on their journals, I noticed three groups who especially fulfilled my best expectations for the assignment: (1) highly motivated students entering with solid writing skills, (2) ESL and international students and (3) nontraditional female students, often from immigrant backgrounds. The first category requires little explanation. The other two were especially gratifying for me as an instructor. The ESL and international students, many of whom felt uncomfortable speaking in class, were encouraged by the fact that grammar and writing were not an issue and were free to write about their experiences of being in a new or unfamiliar culture. The nontraditional "older" female students also took full advantage of the writing opportunities and many of them used the journals to examine their life choices and experiences critically, discussing issues they felt uncomfortable with raising in class. The students who did well and took full advantage of the journal assignment expressed great pleasure and enthusiasm about their writing (some said that it was the first time they felt "empowered" by their writing.)

The 20-25% of students who received *B* put in an adequate amount of effort but tended to write the minimum required for that grade and tended also simply to summa-

rize readings or lecture content without much in the way of analysis. A sizeable number of students (30-40%), however, did not fully take advantage of the learning or grade opportunity that the journals provided. As I said, much of it seemed to be busywork and the resulting impact for me was to indefinitely shelve the journal concept. While I learned so much from the students who did well and felt buoyed by their success, the sheer workload of journals from 4–5 sections of 35–40 students requires a "bigger payoff" in terms of student learning.

Conclusion

The main purpose of evaluating the student journal assignment was to assess its effectiveness in facilitating student learning in the introductory sociology course. While I did not establish any kind of empirical causality between writing and learning, I believe that it benefited the students who put effort into the journals, a small but significant segment of my students from last semester. However, given the significant time commitment, it is not enough to counterbalance the larger number of students who did not really utilize the journals as a learning tool. Would I try the journals again? Absolutely, but more likely in a writing-intensive section, where the sections are capped at a lower number and students are more likely to want to develop their writing skills. I would also encourage other faculty in appropriate disciplines to try the journal (or "journal-like" informal writing) as a learning tool. I will end this article by noting that I haven't abandoned the project of writing the social self in my sociology classes—I still assign the sociological autobiography and have adapted many of the journal entry ideas to in-class informal writing. In future semesters, the project will evolve as I develop different ways to encourage students to think critically about their lives and the world around them.

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Title V: Improving Academic Advising for Liberal Arts Students

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After a Middle States review of BMCC, the limited academic advisement process for liberal arts students was found to be one of the most critical problems facing the college. Liberal arts students in an urban community college have special academic advisement needs. The student population is often non-traditional, consisting of adult learners, first-generation college students, minority students, immigrant students, students for whom English is not their first language, financially disadvantaged students, and students who are not adequately prepared for college. Many community college students juggle their education with family responsibilities and employment, as well as, the burden of commuting. These factors may characterize students who are more likely to drop out of college (Feldman, 1993). Students from special populations encounter specific and unique challenges to academic success that require innovative, holistic approaches to their college advisement.

The primary negative characteristic directly linked to student attrition is inadequate academic advising. According to Crockett (1978), the academic advising process has been considered the cornerstone of student retention. In order for academic advisement to affect retention, it must be a student-centered developmental process rather than a prescriptive activity. Students need to be able to clarify their educational goals and relate those goals to their academic experiences on the campus. Upon entering the college, many students majoring in liberal arts are often undecided as to their future educational/career goals and uninformed as to the potential career opportunities that are available. The Liberal Arts major is a complex, interdisciplinary program and thus, requires early and continuing contact with an advisor.

Numerous studies have shown that when students have a meaningful relationship with someone at the college, i.e. a counselor, a mentor, an advisor, they are more likely to stay in college and succeed. Student advising in higher education is a shared responsibility that enhances student motivation and persistence particularly in a diverse student setting. This concept of developmental advising is described as one in which the relationship between advisor and student is vital. The advisor's role is to help the student look at long term as well as immediate goals. The quality in this advisor/student relationship serves to increase the student's involvement and persistence in college and prepares the student for future decision-making situations (Frost, 1991).

After receiving the Middle States report, a committee of faculty and staff, co-chaired by Freda McClean, Director of the Academic Advisement and Transfer Office, and myself, was convened to discuss how to improve the advisement system for BMCC's 5,000 liberal arts students. In the current system, a student is directed to a liberal arts academic department based on the first letter of his or her last name. There the student receives his or her advisement sheet and waits to see a faculty member who is available for advisement at that particular time. In many instances, the faculty member and the student do not know each other and the advisement is *prescriptive*, with the student handing over their advisement sheet and being told which courses to take in the next semester. Each semester, the student may end up seeing a different faculty member for advisement unless he or she makes the effort to find a faculty member with whom he or she feels comfortable and has a relationship. The current system also requires faculty members to use their office hours for advisement which often creates conflict since that is when students from faculty's classes come to see their professors. Clearly, a system was needed that would address the needs of both faculty and liberal arts students.

After much research, site visits to other colleges and discussion, BMCC applied for and was awarded a 5-year Title V Developmental Grant from the Department of Education. Title V Developmental Grants are specifically for institutions with student populations that are at least 25% Hispanic and it allowed for the creation and implementation of a *developmental* academic advisement system for liberal arts students at BMCC. Dean Erwin Wong is the Project Director and Professor Nidia Pulles-Linares, who teaches in the Modern Languages Department, is the Activity Director for the program.

The Title V Academic Advisement Program is committed to teaching liberal arts students the development and implementation of meaningful and appropriate educational goals that are compatible with their life goals. The program uses a developmental advisement model, the collaboration of trained faculty members from the liberal arts academic departments with professionals from the Academic Advisement and Transfer Center, and the use of a new comprehensive student database. The integration of these elements facilitates the enhancement of teaching and learning, establishes college-wide advisement competencies, and empowers liberal arts students to become independent decision-makers regarding educational and career goals, transfer to 4-year colleges, and life-long learning.

The Title V Academic Advisement Model involves several specific areas of responsibilities integrated into a functional advisement system: students, faculty advisors, educational planners, the Title V Steering Committee, DegreeWorks database and Blackboard (Bb) implementation, as well as a program web site and newsletter.

Liberal Arts Students

Students identified as Liberal Arts majors, with 30 or less earned credits, may join the Title V Academic Advisement Program by simply filling out an interest survey in the Academic Advisement and Transfer Office. They are then contacted by one of our three educational planners. The educational planners administer intake forms to the students prior to the advisement period and registration. After the preliminary meeting with the educational planners, students are assigned to Title V faculty advisors–and the corresponding educational planners- based on student interest, times of availability, and other Steering Committee guidelines.

Students meet with their Title V faculty advisors during the semester to select courses and explore career and/or educational paths and are responsible for being active participants in the advisement process. Meetings are by appointment only so the faculty advisors get to choose when they want to meet with the advisees. The number of meetings is based upon student need and the judgment of the Title V faculty advisors. Individual in-person meetings may be supplemented by meetings via telephone or e-mail and/or by group meetings. Faculty advisors document their meetings on the student database. The goal of these meetings is to foster mentoring relationships between the Title V faculty advisors and the students as well as increase college-wide retention.

Faculty Advisors and Training

Interested faculty members are recruited each semester from liberal arts departments on a voluntary basis. Each cohort participates in advisement training via an intensive 3-day workshop taught by professional consultants and in-house advisement staff. Guest speakers such as Susan Campbell and Charles Nutt, President-elect and Associate Director of the National Academic Advising Association (NACADA), respectively, have led workshop sessions such as "Advising as Teaching and Learning," "The NACADA Core Values of Advising," and "Advising the At-Risk Student." Workshop sessions led by Lesley Leppert, Assistant Director of the Academic Advisement and Transfer Center, have included

"Special Advisement Situations and Transfer Services: Frequently Asked Questions" and "Reading and Understanding the Data Advisement Sheet/Wrong Advisement Activity." Members of the cohort seem to enjoy the challenging activity of finding the mistakes on old advisement sheets and never run out of questions about credits, program requirements, and prerequisites.

The goals of the Title V Academic Advisement Program include increasing awareness of educational resources available to students and increasing referral to and use of institutional & community support services. Thus, sessions are held during the training workshop to familiarize the faculty with the resources available at BMCC. In a workshop entitled "Referral Services," the cohort is given overviews of the services offered by Student Affairs, Counseling, the Office of Services for Students with Disabilities and the Evening/Weekend Program by the staff running these programs. A two-part workshop session called "Special Issues" involves guest speakers focusing on advising students about distance learning courses, writing intensive courses, English as a Second Language courses, and the CUNY Proficiency Examination. Professionals from Financial Aid, Testing, and International Students services also share their wisdom on advising students with special situations in these areas. I, Rhea Parsons, am the co-Activity Coordinator in charge of faculty training and lead workshop sessions such as "The Role of the Title V Advisor" and "Legal and Ethical Issues in Advising." Professor Glenn Miller, who is co-Activity Coordinator in charge of technology, leads an introductory session on how to use the data management systems, Blackboard and DegreeWorks which he follows up with one-on-one tutorial sessions for those who want or need additional training.

The 3-day training workshop, filled with in-house and guest speakers, group activities, vignettes, role-playing, handouts and PowerPoint presentations, is an intense learning experience. Members of the cohorts are asked for their feedback and suggestions, so we may continue to tailor the training workshop to the needs of the faculty advisors but so far, the response has been overwhelmingly positive. When asked "what did you like most about the training?" faculty members' responses included:

"I felt I learned more about how BMCC works and relates to students."
"Getting specific answers to questions I have had for years."
"The chance to hear about other people's advisement experiences and to hear their suggestions and strategies."
"Well-structured and full of useful information."

During the semester, additional workshops on specific advisement issues and changing BMCC policies and procedures are held. Last semester Lesley Leppert held two workshops on "Advising At-Risk Students" and "Technology in Advising." Upcoming workshops will include "Transferring to a Senior College" and "Helping Liberal Arts Students Select a Major." Each semester new workshops will be added based on policy changes, areas of importance, and feedback from faculty advisors. Informal "brown-bag" meetings are held during the semester where faculty advisors may share questions, concerns, suggestions or simply mingle.

Another goal of the Title V Academic Advisement Program is to create an Academic Advisement Handbook for dissemination throughout the College, both in print and online. Title V faculty advisors will contribute to the creation of this handbook by engaging in a threaded discussion on Blackboard.

In addition to the stipend given to those who complete the training and serve as faculty advisors, there are additional perks such as becoming a member of NACADA, getting to attend or present at advising conferences (the last conference was held in Las Vegas!), and a range of goodies such as tote bags, pens and flash drives bearing the BMCC Title V

logo. Title V faculty advisors may also volunteer to receive additional training for faculty mentoring which carries an additional stipend.

So far two cohorts have been trained and there are 45 faculty members from Ethnic Studies, Developmental Skills, English, Health Education, Mathematics, Modern Languages, Music and Art, Science, Social Sciences and Human Services, and Speech, Communication and Theatre Arts participating in the Title V Program as faculty advisors.

Educational Planners

The Title V Academic Advisement Program has three hard-working educational planners, Mary Quezada, Kevin Simmons and Alana Skerritt, who act as liaisons to the faculty advisors and the students. Their many roles include assisting in assigning students to faculty advisors, preliminary educational planning for students' BMCC academic career, placement test interpretation, explaining the data advisement sheet/auditing to students, and guiding students toward appropriate support services. The educational planners are available for students when faculty advisors may not be, such as during the summer sessions. Title V faculty advisors have expressed great praise for the educational planners who have proved invaluable in keeping track of the hundreds of students enrolled in the program.

Steering Committee

A Title V Steering Committee oversees the Title V Academic Advisement Program. The committee is made up of the project director, the activity director, the co-activity coordinators, a member of the Department of Institutional Research, and representatives from the liberal arts departments, Academic Advisement, Student Affairs, Grants and Development and Financial Aid. The role of the Steering Committee is to assist in T5 faculty advisor and student advisee selection, assist in advisor-advisee assignments, disseminate information to departments and the College, assess the advisement program and problem-solving for students, staff and faculty.

Student Database

CUNY is implementing a new database called DegreeWorks which will allow individual advisement sessions to be recorded and provide a historical basis for collecting and disseminating academic advisement information. Data from the system will be collected to evaluate the progress and success of the students and the program. Until the new database is available, a Blackboard site has been set up with groups for the Title V faculty advisors that include each of their students and their educational planner. Here, Title V faculty advisors can communicate with each other in a community-like setting and Blackboard provides an additional means of providing information to the advisors. As previously mentioned, DegreeWorks and Blackboard training is provided on a regular basis to faculty, staff and students.

Web Site and Newsletter

In an effort to further disseminate information regarding Title V and academic advisement to the College, a web site is in the process of being created. The web site will have information about the program, lists of cohort members, details on how to join the program and links to appropriate academic advisement sites such as the Academic Advisement and Transfer Center and TIPPS. A Title V Newsletter has also been created and will feature articles related to academic advisement, conference information and a special "Meet the Faculty Advisors" column with interviews of Title V members.

The Title V Academic Advisement Program is allowing BMCC to change the pro-

cess of academic advisement for liberal arts students as well as for faculty. The program provides these students with faculty advisors and educational planners who work with them for the length of their educational careers at BMCC. Through these relationships, students will develop increased feelings of support and belonging, learn to take more responsibility for their own education, and develop realistic goals for their futures. By using this developmental model of academic advising, the Title V program hopes to increase retention and foster student success.

Anyone interested in becoming a faculty advisor or who wants more information may contact any of the Title V members at titlev@bmcc.cuny.edu

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Discipline Today

Héctor S. Payano
Modern Languages

Discipline is a virtue which has become a problem that concerns us all. As a virtue, almost everybody loves it. However, nowadays, professors hesitate to confront undisciplined students because they immediately raise the flag of their rights: they go to talk to their advisers or to a dean, arguing that the professor was *disrespectful* and must be dismissed. I, personally, was a victim of that strategy. The same happens in the public school system. Students misbehave and the teachers cannot even raise their hands or raise their voice to the students because that is considered a verbal abuse. And of course, if the principal backs the teacher, the parents are sometimes all too eager to ask for his/her resignation. Some parents believe that their children never do anything wrong. Teachers who try to discipline students are the ones who are deemed wrong!

Most parents fail to talk to teachers about their children's behavior when they are supposed to; parents do not go to colleges to find out what and how their children are doing; students do not respect discipline or care about it; and a great number of people and even the school system are in many ways careless about discipline. Discipline today is far from what it used to be. And the toll we are paying for the lack of it is heavily dear.

What will occur if these trends continue as they are now, and we do not head them off? Many people are concerned with what has happened with discipline and morale. One thing is certain: it all started at home and at school. Consequently, we are now paying the price of too much permissiveness, that many call "democracy." Excessive democracy and tolerance intoxicate as much as too much light blinds.

At college, at school and at home, we are responsible for discipline, no matter how democratic we may be. Therefore, it concerns all of us. Colleges and universities have a huge responsibility as far as discipline goes. Let us stop the complete breakdown of it. Let us again make rules for discipline, and enforce them. For discipline is the soul of the country. Let us not permit it to die!

The simplest example of lack of discipline is eating and drinking in the classroom. Students are reluctant to abide by the "no eating and no drinking" rule, no matter how many signs are posted in the classrooms. Yet the students may not be blamed entirely. The sad fact is that some professors also often set a bad example by breaking the rules in the classroom. How can they therefore implement the college policy without the resentment of their students? Naturally, I do not drink or eat anything in the classroom, even if students invite me to do so

Another example of the lack of discipline many professors encounter today is the cellular fever: it has become hard for professors to control students from answering and making calls in the classroom. My method of control is simple and practical. For the most part, I leave my cell phone home to avoid the temptation of answering it. Should I forget and bring it, I turn the ringer off. Again, demonstrating on my own is the best way to instruct others in it.

Predominantly, people who care and are much concerned about discipline feel bad about the way schools, colleges, and universities are handling discipline; and this subject matter requires much attention. No matter how much an interested person complains about the lack of concern about good discipline, the answer seems to be the same in general: he receives the cold shoulder from the general public. And that snub hurts. A person indifferent to discipline may take shelter under the law. But how many crimes are perpetrated in the name of the law! Those who made the laws were at one time disciplined persons very much concerned indeed. However, today nobody seems to care much about this problem (great though it is) that concerns most citizens, the country and its future. "Who cares!" most people generally say regarding discipline. "This is a democ-

racy; and in a democracy like ours, everything is permitted to any one," they declare. Of course, they misunderstand the term and the principle of democracy, and confuse them with debauched permissiveness.

Democracy, of course, is the principle of equality of rights, opportunity, and equal treatment for all under the law. Democracy is not (as many people think) about cannibals and cave men. The fact is that many people are undisciplined, erratic, and chaotic and they want to justify their misbehavior in society by proclaiming the wrong permissiveness in the name of democracy. And what makes things worse is that many teachers and instructors now see discipline as something belonging to our past, unjustifiable, impractical, and irrelevant. Only in convents, seminaries, monasteries and the military is discipline still a *sine qua non*. It seems to me that such niches for discipline may be the only hope for the country. Why do I believe that? Because these institutions go by the book: they never fail to implement their code of discipline. And anyone who leaves there after a course of study does so with a reputation.

In a democratic system we are more or less free to do whatever we want. But for me, democracy in the classroom conveys discipline. For example, professors should always be role models. They should be always on time, never wear hats in class, never eat or drink, and never talk on their cell phones while they are teaching. From Hunter College, to BMCC and Medgar Evers I have seen professors breach discipline while in the classroom. Democracy tends to allow permissiveness; but we, the professors, have to be cautious about what to allow students to do in the classroom and what not to. Of course, there is always a thin line about when and how to allow certain leeway to students. In my opinion, being firm, but tolerant is often the best way.

And here is where language can be important in implementing discipline. We often have to measure and modify our language because discrepancies and sensitivities in the classroom are high and any misunderstanding from students can easily erupt out of proportion. That has been the case when I have requested that students stop drinking or eating in the classroom because the signs on the walls prohibit it. Some students have overreacted by being verbally aggressive, defiant and confrontational, arguing that if professors and some other students have food on their desks, "Why can't I, too?" When I see that the conversation is going about endlessly in a circle, like a revolving door, I stop it, change the topic and continue teaching. Experience has taught me never to confront a student when he/she becomes disrespectful, argumentative or utterly defiant. At that moment the conversation may lead to verbal abuse or something of the kind. Situations like this are very common at BMCC because the students are younger. Coming from high school they bring with them their high school attitudes, which are not appropriate for a college setting.

For some people the rules and regulations in the classroom may seem petty, but for me they are relevant. If the administrators take pains to place those "no eating, no drinking, no radio playing and no talking on cellular" on the classroom walls, they are undoubtedly an important part of academic discipline, and students and teachers alike should follow the rules. The latter, of course, should do their best to implement them. There are far more examples that I could cite, but perhaps loitering everywhere on the college premises and "taking commercial breaks" are for me the more noticeable. Some students leave the classroom at the beginning of the lesson and return at the end; and by doing so they argue that they have been present. In this case, I mark the student absent and, at the same time, I explain to the student what class attendance means.

The above mentioned examples are the ones that capture my attention because they are very conspicuous. Eating and drinking in class, disappearing from class for 45 or more minutes; talking harshly to professors, loitering all over the college premises, etc. are undisciplined acts that students should correct. They might do well to abide by

discipline like a cadet in the military.

In a military academy, for example, a commander or an instructor breaks your spirit by telling things you do not want to hear; he exposes you to routines and exercises that you never dreamed of. The commander intentionally talks to you loudly and roughly in order to make you obey, to compel you to abide by the laws and orders, just for the sake of disciplining you.

In convents and seminaries the situation is similar. The superiors have many ways to tame your personality and purge your bad habits. One simple example, for instance, is at dinnertime when it is time for dessert, let us say, no one is supposed to take the best fruit from the tray, but no one is supposed to take the worst either. That act lends itself to hypocrisy, that is, fake humility. Therefore, everyone has to be fair and straightforward and as natural as possible. And anyone who lacks that type of discipline is immediately expelled from the convent or the seminary.

In colleges and universities, for example, discipline should be implemented more rigorously. Attendance should not be taken lightly by professors; students should not be allowed to come and go as they wish. Research papers should be submitted in a timely manner to avoid excessive incomplete grades, which diminishes students' performance in general. The students should take exams—if that is the requirement—right after completing the course work; and all written reports should be handed in promptly as well.

I know of an extremely bright student who was registered in a Ph. D. program in one university in New York City. In less than two years he had completed all the required course work. However, he did not pass any of the exams. Obviously, for lack of discipline, and for obtaining incomplete grades for most of the courses, he failed to accomplish his goal or to successfully pursue his projected career. Twelve years later, he is still officially registered as a student in the Ph.D. program of that university, which, I believe, failed him as well for not having a strict set of rules for implementing discipline.

Outside the university, the situation is probably worse. Anyone can observe what is happening on the streets of New York City, for example. The disarray, the chaos and filth leave a European, for instance, flabbergasted. What is happening here? Is it the price we have to pay for our great democracy? The raw material for any human being to grow up in a positive manner is self control. This cornerstone served our country as the blueprint to make it what it is, a solid, honest democracy. That vital tool called discipline made our country one of the greatest in the world.

Who is responsible for the decaying situation in our society as far as discipline is concerned? Who is to blame? Is it teachers, parents, the school system, or the government? Whoever or whatever shares responsibility with the whole educational system? I think we all are equally responsible one way or another because permissiveness is the key problem: too much tolerance can be counterproductive. Parents, for example, have become excessively lenient nowadays. They pamper their children by allowing them to do whatever they want, wherever they want. It seems parents consent to their children's demands to avoid confronting reality. They talk about their children's bad behavior, but do little or nothing to stop it. That is wrong.

Students like discipline despite the contradiction; because when they observe a teacher who lacks it they can tell and react against him/her immediately. Even if they want the school and college as a place to "hang out" and around, not a place to form, perform and educate them the way it should be, students do not want to see a weak educator in front of them. Anyone who lacks this vital tool of education, discipline, is going to have a great deal of trouble in the classroom.

Does discipline have value per se? I believe so; history is the best witness because it speaks for itself. And what is education? Education is a discipline and, as such, cannot be but disciplined itself. It is a value per se as well; so we cannot detach discipline from edu-

cation and vice versa. Can anybody get an education without disciplining him/herself? It is hard to achieve, not to say impossible. How could a good professional do well without the pain and firmness of discipline? Discipline, as its name implies, is not a pleasure; not at all. That is why many people cannot stand it. Only those with a good dose of stoicism can bear it. To be a disciplined person one has to have patience and determination.

Discipline means many things: direction, science, study, rule of conduct common to members of a social group, a whip to punish oneself for the religious purpose of flagellation, i.e., as in the Catholic Church, where religious men and women chastise their bodies to control the weaknesses of the flesh. It also means tough self-control, and punishment. On one occasion when I was at L'Hotel de Ville in Paris, I was impressed by the ceiling and the floor of that great building. More than impressed, I was astonished by the extraordinary beauty and handiwork of the renovated palace. I turned to the person next to me and asked, "Professor Cordier, why are these refined and masterly things not available these days?" He replied with the proverbial French irony, "Monsieur Payano, there is no discipline or morale anymore, that's why."

If one looks in an English dictionary, one will find that the word "morale" comes from Latin *mos, moris,* meaning a habitual or usual course of action; it also means practice (and practice makes perfect). Habitual is what we get for doing things or acting by force of habit. Therefore, no one gets any good result in life without the habit of doing things constantly. Discipline is the guide and light that permit anyone to reach his/her goal in life. Now, what comes first, the chicken or the egg? Is our morale weaker because society and the government are too tolerant and more and more corrupt? Or are we becoming corrupt because our morale is weakening? Who is responsible for that?

Our children are the leaders and professionals of tomorrow. What happened with the children of yesterday? They are leaders and professionals today. And, what happened to those who did not abide by the set of rules they learned at home and at school? Indeed, something wrong has occurred, for society in general has changed. Some of the changes are good. But the citizens of today are not nearly as honest, disciplined, and straightforward as our grandparents used to be. Something good is missing today, discipline, above all. The changes in our society, as far as discipline and morals are concerned, are rather negative overall. What can a teacher do?

The Digital Millennium Copyright Act

Alan Wallis
Modern Languages

Walking down Canal Street, a nervous-looking woman approached me with a fake Rolex watch for sale. Chinatown's fake Rolexes are world famous—I suddenly remembered a friend of mine in Spain who had asked me to get him one—but no sooner had I stopped to talk to this woman than a nearby police car give a quick hoot from its siren, and the woman jumped and then vanished into the crowd. I had seen the police defend brand name integrity in Chinatown before, though the last time had been on behalf of Gucci rather than Rolex. The newspapers had run some stories about crackdowns on vendors of unauthorized NYPD t-shirts, and I myself had once seen a rather diminutive Chinese t-shirt merchant lying on the floor of his stall with a large police officer kneeling on his chest as he waited to be taken away. I replayed these incidents in my mind when I began researching intellectual property law for a presentation at BMCC's Teaching and Learning Center, and upon discovering the story of the Digital Millennium Copyright Act (DMCA), it occurred to me that perhaps in the eyes of the law, professors have more in common with the merchants of Canal Street than we think.

Signed into law by the Clinton Administration in 1998, the DMCA attempts to address certain copyright issues raised by the Internet. Under the old laws, copyrighting something like an e-book, for example, might have been complicated. Under the DMCA, not only the e-book is protected, but its encryption software as well. Most significantly, perhaps, the DMCA transfers intellectual property—once exclusively the domain of civil proceedings- into the jurisdiction of federal criminal court. Someone who purchases and downloads an e-book and then cracks its encryption software to print it out for bathroom reading, has committed a federal crime. If that person shows someone else how to do what she has done, she faces, rather than an old-fashioned copyright lawsuit, a sentence of up to 5 years in federal prison and a fine of up to $500,000.

On July 30th, 2001, *The New York Times* published an article by Lawrence Lessig, "Jail Time in the Digital Age," describing the case of Dmitry Sklyarov, a PhD student in Russia who wrote some software to make e-books sold by the Adobe Corporation into documents that could be emailed, cut and pasted, or printed out freely. The employer in Russia for whom he wrote this software had allegedly sold seven copies of it at the time Sklyarov flew to the US to attend a programming convention in Las Vegas. After the convention, as Sklyarov was about to catch a flight home, he was arrested by the FBI. Before finally having all charges dropped and being allowed to return home to his wife and two small children, he had served five months in jail.

"Using software code to enforce law is controversial enough," Lessig wrote in *The New York Times,* "Making it a crime to crack that technology, whether or not the use of that ability would be a copyright violation, is to delegate lawmaking to code writers." In reality, though, it is not the "code writers," but rather the corporations who employ them, whose power is expanded by the DMCA. This law is thus part of a far more familiar process than the exotic and perhaps laughable image suggested by Lawrence Lessig, of computer programmers taking over the government.

The relevance of these laws to BMCC was underlined by a presentation about online teaching given in the Modern Language Department in place of a monthly departmental meeting. The sales rep explained that students would pay a fee, a bit higher than the current $162 for a new Spanish textbook, and would instead be given a computer password for the duration of the semester. Gone would be the buying of secondhand textbooks, even within the shorter and shorter intervals allowed by the ever-more-rapid appearance of new editions. As only one user could collect academic credit for each password purchased, perhaps the DMCA laws would not need to be enforced very often, but still, their

importance to the future of the teaching profession seems self-evident.

Research for my joint presentation on this topic led me to give a second presentation on my own during the subsequent semester entitled, "Copyright or Copyleft: Linux and other Operating Systems." This title led understandably to friendly accusations by people not in attendance that I had disregarded the time-honored boundaries of my academic discipline, but, given the importance of technology to the professors of the future, discussion of legislation like the DMCA is likely to become more frequent.

Surprisingly enough, my efforts to relate the topic at hand to my own scholarly work also proved quite productive, for I managed to relate a large part of the discussion to my research by examining a recently published poem on DVD encryption. This string of haiku stanzas, I realized, could meaningfully be compared to some early 18th-century poetic reactions to Newton's *Opticks*. The poems on Newton, like the one on DVD encryption, were burdened by a scientific agenda -the former singing the praises of discoveries that had transferred color and light from the realm of God to the realm of human understanding, the latter inspired by the possibility of transferring control of DVD playing software from the realm of corporate software giants to the realm of the average computer user. The more recent discovery was forbidden by the DMCA, while Newton's 1704 publication was banned by the Spanish Inquisition.

Though stumbling upon these research ideas was a most welcome surprise, what really made my presentation an enjoyable experience was the discussion that ensued. I had reserved a location outside the TLC so that students would be allowed to attend, and they asked lots of questions. Professors, campus employees, and chairs from an exciting mix of departments showed up as well, as did a consultant from off campus who recently persuaded the state government of Massachusetts to have him install Linux on all of its computers and servers. I look forward to hosting more of such discussions.

Reply to Diana Judd, "Ex-Education: Privatization, Commercialization, and Pedagogy"

Roger Foster
Social Sciences and Human Services

> The painters' products stand before us as though they were alive, but if you question them, they maintain the most majestic silence. It is the same with written words; they seem to talk to you as though they were intelligent, but if you ask them anything about what they say, from a desire to be instructed, they go on telling you just the same thing forever.
> - Plato, *Phaedrus*[1]

> While I sort of miss the in person interaction, at the same time, I think that an online class really helps one to let the information "marinate" for a while before giving a contribution. In a regular class setting, everything is spontaneous. This is not a bad thing. However, I feel like we have had more meaningful discussions online about the topics we have discussed. Whenever something pops up in the mind, it's great to be able to post it 24/7 and really stimulate a conversation.
> - Felix Rivera Perez, student in a BMCC distance learning course[2]

Writing and Speech

The worry about the detrimental effects of technology on learning goes back at least as far as Plato's critique of writing on the grounds of its lacking the communicative potential of the spoken word. Plato, of course, chooses writing as the medium with which to tell us about what writing is unable to accomplish. Nonetheless, it is easy for educators today to identify with Plato's fears about the threats to the teaching relationship from a model of pedagogy that seems to imply a sharp break with current practices (and which, furthermore, seems at least partially driven by non-pedagogical considerations). In her article, "Ex-Education: Privatization, Commercialization, and Pedagogy," Diana Judd rightfully identifies these threats as the encroaching privatization and commercialization of pedagogy. My disagreement with her analysis, however, concerns her suggestion that these developments are inseparable from, and form part of the same process as what she refers to as the "technologization of pedagogy."[3]

There are two points that I want to make about this argument. First, *every* pedagogy incorporates a certain technology. What matters in teaching is *what* technology is used and *how* it is used. While this is a trivial point, the consequences are important. In short, it means that if we want to talk about the detrimental effects of technology, we will have to get into the concrete and substantive details of what an educator is doing with a technology, how it is used in the context of other things that the educator does, and how that use creates (or sometimes doesn't create) new possibilities for learning. This ties in to the second point I want to make. It is impossible to predict the potential pedagogical effects and consequences of a technology just by looking at its structure. Rather, the social impact of technology, as Andrew Feenberg has argued, depends on how educators use it to create learning experiences. Feenberg points out that "[w]riting can lend itself to ongoing

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[1] Quoted in Andrew Feenberg, *Transforming Technology* (Oxford: Oxford University Press, 2002), p. 116.

[2] This comment was posted in a blackboard discussion board forum, on 12.03.2005. It is reproduced here with the author's permission.

[3] Diana Judd, "Ex-Education: Privatization, Commercialization, and Pedagogy", in Inquirer 12 (Fall 2005) 46-8. Hereafter quoted in the text with page numbers.

dialogues between teachers and students, and speech can easily become one-sided."[4] What I am suggesting, then, is that there is nothing *inherently* defective, in pedagogical terms, about written (including on-line) communication. What we have to look at is how the potential of written communication is *used* by educators. Conversely, of course, the all-knowing "sage on the stage" (translation: *windbag*), of which all of us have probably encountered an example or two in our own educational experience, does not lead us to denounce the real transformative potential of classroom dialogue.

I agree wholeheartedly with Judd's suggestion that education is about acquiring the potential to "think and reason for oneself" (p. 47). There is all the difference in the world between education and the transmission of information. I am also equally impressed by the (occasional) potential of face-to-face interaction to enable students to "listen with respect and think quickly on their feet." Having said that, I often wish they would: (i) *listen* more, (ii) show more respect to *other* views, and (iii) think about the issues *beforehand*, instead of just saying whatever happens to occur to them. Perhaps, because of these reservations, I am less inclined to see as detrimental the fact that, in an online environment, "student questions and responses have the luxury of being more studied; students are not required to think quickly and on their feet" (p. 47). This is simply a description of the structural difference between writing and speech. Whether it enhances or diminishes pedagogy, I would argue, depends on whether educators can harness the power of written communication to encourage considered reflection and critical thinking. We can't answer this question just by looking at the nature of the technology.

Education and Corporatization

I think the issue of the role of technology in education is conflated in Judd's article with the different problem of a particular *model* of technology in pedagogy that is driven by commercial interests. In a climate where institutions of higher education are having to come to terms with sharp cuts to their traditional sources of funding, it is understandable that university administrators will see in technology a way of enforcing deskilling, cutting full-time faculty, and cutting the cost of the "delivery" of education. Henry Giroux has noted that many universities have already responded to these pressures by becoming "licensed storefronts for brand-name corporations," selling off space, buildings, endowed chairs, and anything else marketable.[5] The results are more insidious when corporate pressures begin to substantively influence research and teaching. Stanley Aronowitz has referred to a "cultural corporatization" of higher education, reducing many humanities and social science departments to "service departments for business and technical programs."[6] Seen through the lens of the process of corporatization, technology appears as a "means" for providing education more "efficiently," with lower fixed costs and the substitution of "modules" for real, living (and costly) educators.

It is this corporatized model of the role of technology in education that lies behind Judd's fear that technology in pedagogy is part of the same historical process of the replacement of skilled labor in manufacturing industries that "shifts the balance of power decidedly towards management" (p. 47). But the fact that corporate interests *can* appropriate technology for their own purposes does not support the assertion that technology, and online education in particular, is reducible to its corporate misappropriation. In fact, it may be the case that the potential for interaction in an online environment may

[4] Transforming Technology, p. 116.

[5] Henry Giroux, "Academic Entrepreneurs: The Corporate Takeover of Higher Education", *Tikkun* 20:2 (March/April 2005), p. 19.

[6] Stanley Aronowitz, "The Last Good Job in America", in S. Aronowitz and J. Cutler (eds.), *Post-Work* (Londoon and New York: Routledge, 1998), pp. 216-17.

uncover new possibilities for enabling students to develop critical thinking skills, possibilities that *may* enable us, in turn, to see the limitations and rigidities of the traditional classroom model.

Conclusion: Corporate Agents or Democratic Citizens?

Andrew Feenberg argues that the conflict concerning corporatization embodies two different ideals of democratic citizenship.[7] The corporate version views individuals in functional terms as the bearers of a mass of socially useful knowledge which can be deployed in the appropriate institutional setting. The second view sees the value of education as residing in the inculcation of non-functional potentialities, including the potential for democratic citizenship and personal development. Educational technology, Feenberg points out, will not determine which of these paths is followed. Rather, he suggests, "the politics of the educational community interacting with national political trends" will steer the future development of the technology. The point here is that educational technologies do not determine their social and political consequences. What role different technologies play in realizing or hindering a vision of education as the construction of corporate agents or democratic citizens will be decided by the broader social struggle between pedagogical interests (including faculty) and corporate interests.

This suggests, as Douglas Kellner argues, that we should avoid both technophobic *and* technophilic discourse.[8] Technologies *may* be employed to de-skill faculty, and to enforce administrative control. But they may also serve to promote democratization and empowerment. What is important is that faculty begin to envision and theorize ways in which technology can enhance critical thinking and the formation of democratic citizens.[9] To successfully resist the corporate model, there needs to be a faculty-driven vision of how technology can be employed to positively transform the learning experience. In developing this alternative, it is important not to over-emphasize what technology can do. And it must also be recognized that dialogic interaction will always be key to the educational experience (and here I think Plato was right). All the same, new technologies do have the potential to enhance the educational experience if they are driven by the creativeness of committed faculty, rather than by the wishes of corporate interests and administrators.

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[7] Transforming Technology, p. 128.

[8] Douglas Kellner, 'New Technologies, TechnoCities, and the Prospects for Democratization', retrieved from www.gseis.ucla.edu/courses/ed253a/kellner/edtech2.html, January 2006.

[9] This is already happening. An excellent example is the Visible Knowledge Project, at crossroads.georgetown.edu/vkp/.

Grab Your Beret and Put On Your Smock: Reflections on the State of the Art of Teaching (And Learning) at BMCC

Lisa Rose
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Does online learning portend the demise of education as we know it? Diana Judd, in her article "Ex-Education: Privatization, Commercialization, and Pedagogy" (*Inquirer,* 2005) contends that the death of the academy and, no less, the death of "education itself" looms large over the not-too-distant horizon. While she targets proprietary institutions like Phoenix and Capella, she also argues that online courses are nothing more than mechanisms for students to glom information, where very little knowledge building or substantive learning occurs. Prof. Judd likens the transfer of "information to knowledge" (Judd, pg 46) in online courses to the "training" that automobile mechanics receive at vocational institutions (let me go on record as saying that the auto mechanics that have worked on my cars have been some of the most ingenious critical thinkers I've had the honor of knowing; they have listened, questioned, assessed, diagnosed, used their knowledge to create new knowledge—and then solved real problems—no rote learners there!).

There is indeed, as Judd warns, a proliferation of for-profit institutions that offer online courses and degrees in just about every imaginable subject area (Allen & Seamen, 2005). Like Professor Judd, and the many critics of purely market-driven distance education programs, I question the use and "re-use" of designed courses that plug in professors as content experts and don't seem to value the educational importance of student-led construction of knowledge with a tenure-track or a tenured professor (or an experienced adjunct) at the helm, who can navigate the learning experience through oft times uncharted and new waters. No doubt, the drive to create online courses and entire degree programs throughout CUNY is in part meant to stave off a potential exodus to the proprietary institutions that promise more convenient, speedier, hassle-free degrees that are marketed to the population that we have historically claimed as ours, students of color, working, older and may be non-traditional learners (Ruch, 2001).

What follows is not an empirical study that responds to the larger issues posed by Judd. Instead, I offer my own experience as a full-time faculty member who has taught online for more than four years at BMCC and as the Faculty Coordinator for Distance Learning since 2003. From a qualitative and heuristic perspective, I contend that BMCC's online courses are fundamentally different from the for-profits' content-driven low-cost options, that teaching and learning do happen in asynchronous environments, and that online courses here are no fast-food opportunities to acquire information.

First, I relate a bit of history about BMCC's distance learning program. In the Spring of 2001, BMCC piloted three online courses. Since then, more than 50 courses have been developed that can be taught via the internet (CUNY currently uses Blackboard as its instructional software platform). This past semester (Spring 2006) 38 online courses served over 700 students in a variety of disciplines, including: Business Management, Nursing, Philosophy, Math, Chemistry, English, Sociology, Early Childhood Education, Psychology, Anthropology, and Linguistics. Typically, BMCC students are juggling the multiple roles of parent or care-taker, worker and student at once. Thus, the goal has been to create a Distance Learning program that would meet the unanticipated needs of our student population. The intent is to develop courses that meet all of the Liberal Arts requirements so that in any given semester a student could choose from a variety of online courses that satisfy those requirements, avoiding unanticipated interruptions in

completing a degree program.

BMCC has created its program to develop and train faculty to teach online with great care. As our students are diverse and multifaceted, we have tailored a training program that considers their variegated learning needs and styles, while providing opportunities for faculty to gain the technical expertise necessary to launch pedagogically rich online courses. At this point in time, only full-time instructors are eligible to participate in online course faculty development. If a faculty member creates a course, that course cannot be taught by anyone else, unless that faculty member participates in training and goes through the same course approval process as did the original course developer. If one were to peruse a sample of BMCC's online courses (ask any of our faculty who teach online, I'm certain they'd give you the cook's tour), one would find that they reflect the scholarship, passion for teaching, and idiosyncratic qualities of their instructors. There are no paint-by-numbers courses that could simply be facilitated by the next knowledgeable instructor who comes along.

Central to all BMCC online courses is the asynchronous Discussion Board. There, the instructor will post questions that require students to consider course content, reflect upon it, and craft responses. Importantly, each student must respond to another student's post, and the response must be substantive (not mere agreement or disagreement), thus generating truly meaningful discussion. The faculty member monitors the "Board" and interjects when appropriate. In so doing, students learn to apply the discourse of the discipline, develop critical thinking and writing skills, learn about collegiality, and create a community of learners that is not necessarily reliant on the "sage on the stage" feeding them knowledge.

Since September 2001, I have taught HUM 401 online, which is an integrative seminar that accompanies the second semester of the Human Services Field Experience, an 84-hour practicum. Since online course material is static and viewable from semester to semester, it allows an instructor to reflect, analyze, and then refine teaching interventions and practice in order to increase learning opportunities. Teaching the course over eight semesters has enabled me to carefully consider assignments, student work, discussion board forums, and lectures. I have wrestled with questions like: What have students learned? What assignments must be improved? What theoretical constructs are useful in understanding teaching and learning online? What can I take from this experience that I can apply in my face-to-face sections?

Utilizing my online teaching experiences, I've conducted research, presented at conferences, and written articles. For example, at the Council of Social Work Education's Annual Program Meeting in February 2006, I presented a paper, "Utilizing Small Groups to Introduce Evidence-Based Practice in an On-line Field Seminar." I discussed the need for providing opportunities for students to understand the utility of learning from articles published in peer-reviewed professional social work and human services journals. This helps emerging professionals to integrate theoretical and empirical perspectives into their practice, learn important research skills, and develop a pattern of life-long learning. Social work educators often utilize small groups to maximize student learning and there is evidence that online field seminars are both effective in providing substantive learning experiences and popular as alternatives to face-to-face seminars (Wolfson, Magnuson, and Marsom, 2005). I suggested that an online integrative seminar can provide critical opportunities to consider difficult practice questions, conduct library research remotely, and then share what was learned with a small group of students placed in similar practice settings. I reported on a qualitative study where I conducted a content analysis of student papers, online presentations and group discussions. I then applied a number of theoretical lenses like Evidence-based practice (Sackett & Parkes,1998.), Critical Thinking Approach to Teaching Research Skills (Krapp, J.V. 1988), and Scaffolding (Shepard,

2003) with which to analyze not only their work, but also applicable as constructs in teaching research skills throughout the continuum of social work education. In my talk, I discussed the process of reflecting on my online teaching and how I've used that to inform my face-to-face teaching by utilizing a small-group approach rather than student presentations to the entire class.

At the conference, there were dozens of presentations in which distance learning was discussed, and from a cursory search of the full-text library database Academic Search Premier, I counted 472 peer-reviewed journal articles on the topic of "social work education and online learning." Clearly, I am not the only one utilizing this fertile teaching and learning medium to strive toward building new knowledge in my field.

I found myself laughing out loud when reading Arras' "It's a Simple Game: A Professor Reduces His Teaching Life to A Few Bullet Points" (Chronicle of Higher Education 3/24/06). "I truly believe that PowerPoint is the spawn of Satan," he says, "It breeds passivity in the students and disconnects the speaker from the audience." I too am a strong believer in the power of eye contact over PowerPoint. An academy where technologies, devoid of human mediation, are the only teachers would indeed be a deadly place. The real alternative is not the eschewal of technology, but an open and flexible hybrid experience where students engage in some "chalk-and-talk" courses and some fully online, and still others somewhere in between. Here at BMCC, a mosaic of innovative teaching and learning technologies from Ipods to mechanical dummies are being explored and applied, and faculty and students are creating knowledge and developing skills in the process. Is the art of teaching on the verge of extinction, as Judd predicts? I don't think so. What we have instead is a different kind of canvas and a new set of paints.

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Implementation of Global Practices in Modern Languages

Alister Ramírez Márquez and Maria Enrico
Modern Languages

From Alister Ramírez Márquez

I was aware of global citizenship prior to attending the Salzburg Seminar with the theme, "Community Colleges as Sites of Global Citizenship" in the summer of 2005. However, the lectures and workshops at Salzburg helped me articulate how to emphasize global responsibility within the Spanish Language curriculum, even in an elementary level class.

What is the connection between giant turtles, Spanish for beginners and globalization? Apparently the answer could be simple: none. However, the relationship enables us to reflect on culture, language and how to make students become global citizens. By the end of the Spanish 101 course, students should be familiar with greetings, basic vocabulary (numbers, colors, family, body parts, class room objects, weather, etc), present and past tense of regular and irregular verbs, direct and indirect object pronouns, demonstrative adjectives, reflexive pronouns, among others. Students are expected to develop basic communication skills; in other words, they should be able to comprehend, speak and write with some grammatical mistakes, but they must be capable of communicating in the context of basic conversation. For example: "Me llamo es Karen" (I am Karen or my name is Karen), which is grammatically and horribly incorrect; however, the speaker is able to say her name. Another example is: "Yo gusta leche," which the student may use incorrectly to express the idea that she likes milk. The correct form is: "Me gusta la leche" (literally, "milk pleases me" or "I like milk").

During the semester, students drill in class, go through tedious exercises, memorize expressions, vocabulary, and very often become conscientious with their language. One reason is that it is the first time that they must think about the definitions of a noun, a pronoun or a verb. Having said that, a language without a cultural component is like an apple pie without apples, an empty fortune cookie, and in terms of Spanish literature, *"la Mancha"* without *"don Quijote"* or *"One Hundred Years of Solitude"* without magic realism. Languages are born; they grow, develop, and some die. Part of their beauty is derived from the constant changes that they undergo. When students proceed to Spanish 102, they may not remember the rules of usage of *ser/estar* (verb to be). However, they will remember the giant turtles of the Galapagos Islands in Ecuador. They may not necessarily recall the end of chapter III of *Panorama*, the Spanish textbook they read in class about the South American country and Charles Darwin's journey through these islands.

In order to make my students aware that they are global citizens, I link the teaching of language with a fascinating topic: species in danger. Students read short paragraphs in Spanish about the country, in this case Ecuador, Darwin, and some living creatures studied by the scientist. By incorporating global issues in my Spanish class, students develop reading skills by recognizing cognates (words similar in Spanish and English), and they learn about this amazing place. They also improve their speaking skills by describing these animals in Spanish: *La tortuga es grande, fea, bonita, vieja, etc* ("the turtle is large, ugly, beautiful, old, etc"). Due to the rudimentary level of the course, we engage in a discussion in fragmented Spanish about Charles Darwin, his trip to South America, his theories on evolution, and how some of these species, like penguins, survive in this tropical environment. Students are motivated, and the ones who never participate orally, take a risk and become part of a class in which we connect giant turtles, Spanish language, and global issues.

Perhaps a language educator's greatest challenge is to meet the needs of all of his or her students. The consistent incorporation of global citizenship into the curriculum

is a powerful tool in this regard. Students' language acquisition can be fostered through more channels of input, and one hopes that this knowledge will be encouraging and empowering.

Resources

www.islasgalapagos.ec
www.languageguide.org/espanol
www.spanishgrammarexercises.org
www.vistashigherlearning.org
www.mnh.com

From Maria Enrico

The week spent at the Salzburg Seminar on "Community Colleges as Sites of Global Citizenship" in the summer of 2005 was wonderful for a multitude of reasons, but most importantly for the opportunity to exchange ideas with colleagues both from BMCC and around the nation on exactly how to go about implementing globalization into our classrooms. The Association of American Colleges and Universities calls upon teachers to help their students "develop intercultural competencies so they can move across boundaries and unfamiliar territory and see the world from multiple perspectives" (www.aacu.org/SharedFutures/guidingprinciples.cfm 3/6/2006). I believe the foreign language class is uniquely suited to meet this challenge.

The first step is to stress effective oral communication in the foreign language classroom. This is not an easy task. Students are often reluctant to talk–even in their native language–unless they are interested in the topic. Unfortunately, most textbooks (especially at the elementary level) are not very interesting and are crammed with grammar drills. The only textbook topics that seem to have any relevance at all for students are the ones dealing with food or clothing. One way to encourage meaningful dialogues is to use international current events in a stimulating and hopefully, non-confrontational way. It is a mechanism to not only get the students to talk in the target language, but as noted at the January 25-28, 2006 annual meeting of the Association of American Colleges and Universities, to also address the fact that they often, "… lack deep understanding of the world and how global forces are shaping their futures… and actually lack interest in acquiring such understanding" (www.aacu.org/meetings/annualmeeting).

In my Italian language classes, we compare the American Constitution with Italy's, look at election coverage in Italy and come up with slogans for candidates and their platforms. For this specific assignment, the students write a short essay in Italian, highlighting significant differences between the American Constitution and Italy's; make an oral presentation on the differences among the major political parties in Italy, and engage in a debate with their classmates on the political differences between the US and Italy. Students must also consult and reference the official Italian embassy website and its links to on-line versions of Italian newspapers and the various political parties. In some classes students act out short plays that deal with marriage in Italy and view current Italian movies covering a wide range of contemporary hot topics. We go on field trips to exhibits on Italy and, to everyone's great delight, to local Italian coffee shops where everyone has to order in Italian. The result has been increased enthusiasm for speaking and writing in Italian, greater understanding of the communalities and the reasons for differences in the two cultures, a desire to continue studying Italian (several students have applied to Hunter and NYU to major in Italian). Last, but not least, a significant number of students have visited Italy on their own (one on his honeymoon) and others through BMCC Study Abroad Program to Italy.

In a recent article entitled, "Connecting Language to Content: Second Language Literature Instruction at the Intermediate Level," Gisela Hoecherl-Alden of the University of Maine wrote that, "The teacher's role is to educate students to become critical consumers of their own culture, and in the case of the foreign language student, also the L2 [second language] culture" (*Foreign Language Annals,* Vol. 39, No. 2, Summer 2006, 245). This goal, and how to implement it, was the overriding theme of the Salzburg Seminar on "Community Colleges as Sites of Global Citizenship" and it is one that applies to all fields of study, not only foreign language instruction. The Salzburg Seminar is an invaluable experience and one that I recommend to all faculty offered the opportunity to attend.

Recommended Readings

The Association of American Colleges and Universities
www.aacu.org/SharedFutures/gened_global_learning/goals.cfm

The Committee for Educational Development – report on Education for Global Leadership: The Importance of International Studies and Foreign Language Education for US Economic and National Security ced.org/docs/summary/foreignlanguages.pdf

Educating Leaders for a Global Society. www.internationaled.org

Salzburg Seminar: Professional Development in a Global Village

Cynthia Wiseman
Developmental Skills

Professional development—we all think that it's valuable and we all embrace the notion, theoretically. The benefits can be enormous on both a personal and professional level. Who could object to any administration's efforts to promote professional development among the faculty?

Even so, I felt a bit of concern as I submitted my application for the Salzburg Seminar in spring of 2005. I questioned my own motivation for applying, and I considered the wisdom of the expenditure at the institutional level. I asked myself whether I should actually apply. I heard colleagues saying that the money should be spent on other things, and I wondered how applying for this opportunity would make me look. When my application was accepted, I was ecstatic but my delight was shadowed by that uncomfortable feeling tugging at the back of my mind about the justifiability of this award. I thought about all the things that the students needed.

Those vague concerns about the Salzburg Seminar that lurked in my subconscious reminded me a little of the concerns that plagued me and others in my cohort of Peace Corps Senegal 1975. I recalled the first session of our orientation when we went around the room introducing ourselves. Some raised concerns about the criticisms of Peace Corps as "a front for the CIA," among others, but some admitted that in fact they were volunteering to serve in another country in the Peace Corps for more selfish reasons, such as using that experience as a stepping stone to a career in international affairs or some related field. None of us wanted to present ourselves as our more altruistic counterparts in the 60s before us had done. We thought we were more worldly, more pragmatic. Curiously though, all of us seemed reflective, thoughtful and conscious, and our discussion was an open, candid and honest one that revealed not only self-interest, but also it revealed something of our more altruistic natures.

Now when I think of that experience in Peace Corps and my experience in the summer of 2005 at the Salzburg Seminar, more than anything, I am aware of the tremendously positive impact that each had on my professional development. Through service in Peace Corps, I became a much more conscientious and concerned global citizen. I became aware of the gluttony of developed countries through witnessing starvation, which afflicts most of the world, and more conscious of the ramifications of unconscious consumption. I became aware of the economic suffering of those in less developed areas and the tremendous advantages that education offers, and I learned of the need to do something about it. Salzburg Seminar rekindled that awareness and the desire to act. It was through the Peace Corps experience that I came of age as a global citizen and began a lifelong period of service to my family, my community, and to the global village. And through the Salzburg Seminar, I have renewed that commitment.

Salzburg Seminar presents a tremendous opportunity for those of us who have chosen a path of public service as faculty in the community college. The Salzburg Seminar is the ultimate in professional development, that special occasion to retreat from the grind of our everyday work week and reflect on what we are doing, personally, but most of all professionally. Salzburg Seminar offers that rare moment when we can reflect on what we are doing at our colleges on a day-to-day basis within the framework of the larger picture, that is, as members of a global village, a global community. It offers faculty a chance to further their own sights, to broaden their own horizons, to challenge personal and professional paradigms that provide a comfort in their predictability but sometimes stifle the possibility of change that new paradigms can offer. Semester after semester, we

walk through the same drill, figure out the subject matter that we teach, run through the same lessons, meet the same deadlines and confront the same challenges. Sometimes we work so hard to master those challenges that present themselves each semester that we forget that the world outside the college is changing. Before we know it, five years have passed and we've been using the same textbook for all those years.

Current reforms in education at all levels focus on the need for ongoing professional development so that teachers learn new roles and new ways of teaching. The U.S. Department of Education's Professional Development Team identified ten principles of high-quality professional development to serve as guidelines to both professional development providers and recipients. These principles reflect and embody what research identifies as best practice for professional development opportunities (Office of Educational Research and Improvement [OERI], 1997). Those principles include a focus on teachers as central to student learning, a focus on individual, collegial, and organizational improvement, respect for and nurturing of the intellectual and leadership capacity of teachers and others in the school community, promotion of continuous inquiry and improvement in school life, and collaboration among peers and all participants.

Creating professional development opportunities for educators helps teachers help their students to achieve ambitious learner goals established by educational reforms recently established at a national level, but also learner goals imposed by a rapidly changing global community. Initiatives for professional development that prepares teachers to help students require the ideological and economic support of the school administration. Thanks to the vision of the administration here at BMCC, our faculty have been given a rare opportunity for professional development that will provide the college faculty with the awareness and, hopefully, the conceptual foundation necessary to make our school a site that prepares our students for global citizenship. An experience like the Salzburg Seminar provides a solution to the issue of how to carve out time, opportunity, and other resources that teachers need to realize a larger national vision of education reform that includes professional development as a cornerstone of its policy here at the local level in our community college.

Unfortunately, implementing a professional development project like participation in the Salzburg Seminar is often hampered by public perception of teachers' work. There are concerns that resemble those that Peace Corps volunteers experienced, concerns about stretching scarce funding sources for professional development when there is a clear need for additional counselors or more space. According to McDiarmid (1995), "Although reform has changed expectations for teachers, how the public and policymakers perceive teachers' work has not changed. They continue to think teachers are working only when they are with their students. As a result, there is little support for providing the time and resources teachers require for teachers to change their practice" (p. 2). Castle and Watts (1992) explain that "the traditional view of teachers' work is governed by the idea that time with students is of singular value, that teachers are primarily deliverers of content, that curricular planning and decision making rest at higher levels of authority, and that professional development is unrelated to improving instruction" (p. 2). This limited view of teaching does not allow opportunities for teachers to, among other things, continue their own learning. This perception plagues teachers too, hence, the concerns, self-doubt, even self-recriminations.

As an educator, I know the value of my own education, and I am aware that the world is changing quite rapidly right in front of me. Several weeks prior to attending the seminar, I entertained the notion that the study of globalization could indeed serve in my role, preparing students for the new world. I began to think more carefully about the focus of the seminar--the community college as a site for global citizenship. The terms *globalization* and *global citizen* were being bounced back and forth on campus and among

the prospective participants, and I felt a bit like a provincial Polyanna. I wondered where I had been all these many years because I felt as if the world had changed overnight and I hadn't changed with it. I had been too busy raising a family, grading papers, and listening to my students lament their fate at having to pass the ACT.

I began to notice *globalization* in the news. Thomas L. Friedman's book *The World is Flat* hit the newsstands and I raced to open the cover to find that while Friedman was embracing this "new" phenomenon, not everyone was welcoming globalization. Outsourcing is a reality that I had been aware of and of course it's something that we have all had to deal with as we negotiate a simple customer service transaction with a "Mary Smith" who speaks with an accent that is certainly not the standard Mid West English dialect that identifies someone from the heartland. Once again, I began to question the wisdom of this journey. What was I committing to by embracing the notion of "community college as a site for global citizenship"?

My preliminary research revealed that the term *globalization* has acquired considerable emotional force. Some people look at it as a process that is beneficial—a key to future world economic development—and also inevitable and irreversible, while other people regard it with hostility and fear, believing that it increases inequality within and between nations, threatens employment and living standards, and thwarts social progress. I also found that *economic globalization* is a historical process, the result of human innovation and technological progress. These technological advances have made it easier and quicker to complete international transactions, thus increasing the integration of economies around the world, particularly through trade and financial flows.

Globalization sometimes refers to the movement of people (labor) and knowledge (technology) beyond national borders and across international borders, through the same market forces that have operated for centuries at all levels of human economic activity—village markets, urban industries, or financial centers. The sociologist, Anthony Giddens, defines globalization as a decoupling of space and time, emphasizing that with instantaneous communications, knowledge and culture can be shared around the world simultaneously. Ruud Lubbers, a Dutch academic, defines it as a process in which geographic distance becomes a factor of diminishing importance in the establishment and maintenance of cross border economic, political and socio-cultural relations (globalize.kub.nl/). Critics on the left define globalization as a worldwide drive toward a globalized economic system dominated by supranational corporate trade and banking institutions that are not particularly concerned about the well-being of the individual. *Globalization* was not something that I could quite wrap my mind around. I faced the challenge of a new paradigm.

The paradigm shift kicked into high gear as we pulled into Schloss Leopoldskron. The castle stood majestic against the backdrop of a beautiful lake and the Austrian Alps. Leopoldskron was a family estate commissioned by the Prince Archbishop of Salzburg, Leopold Anton Freiherr von Firmian (1679-1744), who was a great lover of the arts and science. Upon his death the Schloss was bequeathed to his nephew Count Laktanz, a great patron of the arts and one of the first sponsors of the Mozart family. After several different owners and various reincarnations, in 1918 the Schloss was purchased by Max Reinhardt, Europe's most famous theatre director and co-founder of the Salzburg Festival. The Schloss was then renovated to become a gathering place for theatrical producers, writers, composers and actors from all over the world. During WWII the Schloss was confiscated and occupied by the Nazis until 1945 when it was returned to the Reinhardt estate. Then, in 1946, Clemens Heller the visionary of the Salzburg Seminar, was granted use of the estate for the first seminar. Later, in 1959 the Salzburg Seminar purchased Schloss Leopoldskron as the center for its work.

The Salzburg Seminar is an independent, non-governmental organization with a

Board of Directors drawn from diverse regions, backgrounds and fields of expertise. The organization hosts sessions, called Salzburg Seminars. These seminars are five-day sessions focused on critical challenges confronting the global community and designed to formulate innovative solutions to global problems. Beginning with Session 1 in 1947, the Salzburg Seminar has convened people committed to making a difference in the world in candid and informed discussion to inspire innovative thinking and to pioneer practical strategies for change. It was into this global community that we were welcomed and a new paradigm began to take shape.

In our session, over the course of a week, five days really, there was so much to learn, so much to consider—so much input. The notion of globalization had been merely academic and now we were being asked to actively define that term, making it our own. We were requested not only to discuss globalization and its implications for us in the community college, but to implement that notion in small group projects as well. We were asked to reconceptualize our institutions, not just as local sites for the education of diverse populations, but as institutions that would provide the skills and education necessary for our students, many of whom come from disadvantaged situations, to claim their citizenship in the global village. We were being asked to stretch the limits of our imagination to reconceptualize the role of the institution and to reconceptualize our roles within that new organization. What do global citizens need in order to compete in today's global marketplace? What skills do our students need to acquire to function at a level that will qualify them for leadership roles in that world?

The Salzburg Seminar provided ample food for thought. The first speaker was William Reckmeyer, Professor of Leadership and Systems, San Jose State University and Chief Systems Scientist with the Department of Defense System-of-Systems Engineering Center of Excellence. Prof. Reckmeyer presented a new dynamic paradigm of the various systems at play in our global village in his presentation entitled "Developing global Citizenship: Leadership for the 21st Century." Bringing us more in contact with the larger systems at play, we were privileged to hear Adnan Shihab-Eldin, the Acting Secretary General of the Organization of the Petroleum Exporting Countries (OPEC) speak about the history of OPEC, as well as Associate Justice of the US Supreme Court Anthony Kennedy, who defined the national and supra-national dimensions of citizenship. Both of these distinguished guests brought us beyond the familiar borders of our normal routines to glimpse the state of the world that for us, like the pre-Galilean egocentric gatekeepers that we sometimes are, somehow seem to be orbiting around us in our respective college communities. In our rush for tenure, our speed to serve on committees, to keep our pass rates up, to publish, to meet all our administrative responsibilities AND to teach our students, our colleges become the center of the universe and the rest of the world seems to just circle around.

Indeed, with Charles Hopkins, United Nations Educational, Scientific and Cultural Organization and Chair at York University in Toronto, Canada, we revisited the community college but the paradigm had shifted. We were beginning to look at the international perspective: "Roles that Education can Play in the Pursuit of a more Sustainable Future: An International Perspective." Implementation of this new role for the community college as a site for global citizenship became something more than an abstract notion with a presentation by Dr. Shereen Lerner, Chair, Department of Cultural Science and Anthropology at Mesa Community College in Maricopa, Arizona. Dr. Lerner presented the fruits that this opportunity for professional development can bear. Having participated in the Salzburg Seminar the prior summer, Dr. Lerner returned to her community college and developed a Certificate of Global Citizenship, which will be available to students majoring in a range of subjects. This certificate will be offered in addition to the major and simply requires the careful structuring of the program of study to include courses certi-

fied by the college to have a significant global education component. It was a concrete example of how this slippery notion of global citizenship can be realized in a practical way. The paradigm shift continued with additional presentations and discussions. Dr. Bernd Baumgartle, Executive Director of Navreme Knowledge Development in Vienna, startled us with the provocative notion that there is only one race, the human race, that the differences perceived to be attributed to "race" are really differences in ethnicity. Such initiatives as his program in Intercultural Education follow the EU Race Directive, which rejects theories of separate human races that divide rather than unify.

By the fifth day, we were inundated with information, gasping for air, but somehow still conscious, and moving into a new sphere, a new space, embracing a new paradigm. There seemed to be a logical structure that framed the entire experience and had shaped our vision of the community college as a potential site for global citizenship, a place where we could collaborate with colleagues and craft programs that would provide avenues for our students to embark on this journey with us. We had worked together in smaller thematic action groups in which we outlined an architectural blueprint for some aspect of the creation of a site for global citizenship and came to a consensus for a preliminary proposal. Each group's presentation of their proposal was the culmination of a week-long study of globalization.

Today, I cannot say that I have made up my mind about globalization or that I have the definitive definition of what globalization is or what being a global citizen means. From what I understand, the jury is still out on the potential ramifications of this process. I still cannot define exactly what it means to be a global citizen. I can say, however, that I am convinced of the power of this force that is sweeping the globe and I know that my students–and my own children–need my help in preparing them for what is to come. Young people today need to begin with the basic skills in order to get their piece of the pie, but they also need the knowledge and wisdom to make conscientious decisions about what they do, both professionally and personally, since the actions of one country can have an immediate, direct and profound effect on another country. While this is not a new idea, the advances in transportation and communication have made those effects more powerful and have made us more conscious of our actions.

As a result of participating in this unique experiment in professional development, I realize that I must somehow change certain aspects of my teaching to meet the new demands of an increasingly technological world. I have to accommodate the learning needs of students who have grown up with computers or videogames and learn to exploit these new channels of communication, rather than reject that expertise as mere entertainment. But I must also prepare those students who lack those technological skills to allow them to enter the race as well. I have to figure out ways to get students to "chunk this information" in schemas that they can easily access in order to meet the demands of new telecommunication systems. Somehow, I have to bring this awareness of the world as a global village to the students to make them aware of the competition that they face. And, of course, I have to commit to my own professional development, which did not end with the return home. The Salzburg Seminar helped jumpstart my interest, once again, in my own education and renew the belief that teaching and learning go hand in hand.

Globalization is a monolithic phenomenon. The challenges in preparing our students to be citizens in the global village are great for educators like me who grew up in a much calmer, laid-back environment. But, I'm not dead yet. It's a new world.

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

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