HOSTOS COMMUNITY COLLEGE

TOUCHSTONE

VOLUME 3.1 (SPRING 2010)

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EUGENIO MARÍA DE HOSTOS COMMUNITY COLLEGE
THE CITY UNIVERSITY OF NEW YORK

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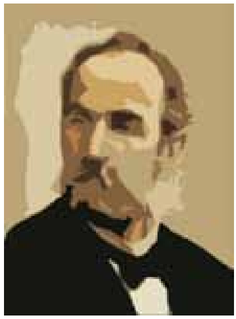

TOUCHSTONE

The Journal of the Professor Magda Vasillov Center for Teaching and Learning

Hostos
Community College

TOUCHSTONE
Volume 3.1 (Spring 2010)
Published annually by the Professor Magda Vasillov Center for Teaching and Learning, the Division of Academic Affairs, Eugenio María de Hostos Community College of The City University of New York.

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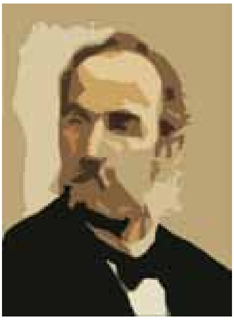
Cover photographs by William Casari.

TABLE OF CONTENTS



TOUCHSTONE

2010 CALL FOR PAPERS

La piedra de toque de la enseñanza es el interés que produce...

In linking the power of teaching to a broadening of our vision, Eugenio María de Hostos affirmed the power of education. In honor of our namesake's belief, we have created Touchstone, a new journal devoted to the scholarship of teaching and learning and published yearly by the Magda Vasillov Center for Teaching and Learning. We are now looking for contributions for our second edition.

Call for Papers in English or Spanish:

- Original scholarship on teaching and learning (5-7 pages).

- Short articles (2-5 pages) on:

    - Best practices
    - Technology in the classroom
    - Assessment and evaluation
    - Classroom-based research
    - WAC and beyond
    - COBI projects
    - General Education
    - Conference reports
    - Teaching challenges
    - Personal Reflections
    - Reviews of textbooks and scholarly works; and
    - Creative works on teaching and learning.

Send your articles in MLA style (endnotes only) to Touchstone's editors by December 31, 2010. For more information, contact: Carl James Grindley (cgrindley@hostos.cuny.edu) or Kim Sanabria (ksanabria@hostos.cuny.edu).

Visit us online at: http://www.hostos.cuny.edu/oaa/ctl_touchstone.htm

PREFACE

Lucinda Zoe

What a delight to be publishing the third edition of *Touchstone*, the Hostos journal on teaching and learning. For three years now we have gathered our forces to document our work, share ideas and pedagogies, explore best practices and, in effect, create a social life for our ongoing conversation around teaching and learning. Besides being a forum for an exchange of ideas among faculty, this annual publication is also designed to provide faculty with an opportunity to prepare a manuscript for publication and have it reviewed and edited by a team of caring colleagues. Dean Kim Sanabria and Professor Carl James Grindley serve as the co-editors of the journal, and have once again, with the Editorial Review Board, taken on the task of critically reviewing and editing the work of their colleagues. They have done so as a true labor of love and should be commended for their thoughtful and caring approach to this work. *Touchstone* serves as the springboard for submission to a peer-reviewed journal in the field. All authors included in this volume are encouraged, expected even, to enhance and expand their articles for publication in the professional scholarship of teaching and learning beyond the college.

This year our Center for Teaching and Learning (CTL) has focused its efforts on how students learn as part of a college-wide campaign to improve retention and persistence. What happens in our classrooms on a daily basis is what makes our students persist. It is what faculty do in their classrooms each day to light that fire that will ignite in our students the passion that will drive them towards finding the life they were meant to have—be it an engineer, a math teacher, a forensic scientist or an actor. This is what we, as educators, do and you can see it all here in vibrant color in the pages of this volume of *Touchstone*.

Learning should be integrated and applied and, as one of our education faculty declares, it is often messy, loud, and unpredictable. At least that is what it looks like when it is working and our students are actively participating in the process. Hostos faculty excel in their efforts to examine their approaches to teaching and learning and imagine more intentional and creative methods for engaging the students in their course of study—be it quadratic equations, gravity-defying principles of applied physics, content-based ESL instruction and the use of cognates in reading academic English or learning styles in online classrooms. What is evident here in these pages is how engaged we are in not only teaching, but in how our students are learning. National student satisfaction surveys consistently point to a few key characteristics of a good teacher and very near the top of the list is faculty expertise and command of their subject discipline. Hostos faculty are intellectually engaged in their disciplines and continue to publish and present at conferences and use their expertise to inform their approach to teaching to creatively challenge our students by a deeper understanding of how they learn.

The new Faculty Travel Fund encouraged more faculty to share their work and allowed for greater opportunities to travel and present papers at conferences. The CTL hosted the annual COBI Retreat at Bear Mountain in April with over 60 faculty and other professional colleagues in attendance for two and a half days in the woods, working not only across disciplines, but across divisions, to improve student persistence and retention through collaborative initiatives and innovations in the classroom. What a year! And, indeed, our persistence increased the college retention rate from fall to spring over last year, so we should all be proud of our work in the classrooms that did indeed light the fires and spark the passions in our students from one end of the Grand Concourse to the other. On behalf of the Office of Academic Affairs, I am delighted to present this volume of *Touchstone* and invite you to gaze-into the window it provides into the Hostos educational experience.

Dr. Lucinda R. Zoe
Interim Provost and Vice President forAcademic Affairs

INTRODUCTION

Carl James Grindley
Kim Sanabria

From English to the Library, from the Humanities to Behavioral and Social Sciences and from Business to Math, faculty members across Hostos have worked together to produce this third volume of *Touchstone*. We thank our contributors as well as our readers, who, we are assured, will be stimulated and inspired by reports from their colleagues.

We would like to acknowledge the support and dedication of the following individuals: Interim Provost and Vice President for Academic Affairs, Lucinda R. Zoe; Interim Associate Dean Amanda Bernal-Carlo, Director of the Center for Teaching and Learning; Department Chairs, who have constantly backed this publication and encouraged their departments to collaborate; and our reviewers, Dr. Richard Gampert, Director of Institutional Research, and Professors Gina Cicco, Jennifer Tang and Elyse Zucker.

The journal begins with the story of an interdisciplinary undertaking conducted by Profs. Zucker and Bill Casari. This was a project that connected the Grand Concourse, the century-old "Boulevard of Dreams" along which the college is located, with the dreams and aspirations of our students, many of whom live in its shadow. Students engaged in this project read about an array of individuals, weighing and considering their stories as Francis Bacon exhorted all true readers to do, and advancing their capacities as booklovers.

The second piece in the journal is another dramatic story, documenting a day at the college when writing seized center stage in the students' educational journey. Profs. Fabrizio and Hirsch describe how, in observance of the National Day on Writing, Hostos students filled the walls (both physical and virtual) with their observations, interpretations, artistry, and aspirations, and were pictured proudly sharing their work for public examination. The wall was an extracurricular venue that Prof. Henderson would value for its ability to create the student interactions she described in her comments.

In the digital design classroom, meanwhile, students were learning about collaboration in a more structured setting as they worked to build consensus around team projects under the leadership of Prof. Shad. Worthwhile accomplishments are rarely the work of only one, and as Prof. López also noted in his observations on ethics education, cooperation is a must. When viewpoints diverge, students are presented with the opportunity for real learning, as they move from the classroom into professional environments where both personal responsibility and partnership are valued and equality upheld. To complement this ideal, offered next is a report by Prof. Ialongo, who describes two projects in which students examined gender in the context of Enlightenment documents, including the Declaration of Independence.

Moving from the Humanities to Natural Sciences, the next two pieces tackle the importance of educating our students about health issues and the environment, respectively. Prof. Trachman made topics in microbiology real to her students by linking theoretical studies about the flu with some hard-hitting evidence about viruses and vaccines, topical issues that truly affect us all. Then, in the next piece, a five-faculty team from the perspectives of biologists, chemists and physicists, call the college's attention to the challenges of creating a sustainable environment, and describe teach-in events at Hostos that raise our collective awareness about the need to protect our fragile world.

In the spirit of emphasizing the bond between the classroom and life, we turn next to two exciting new approaches to teaching mathematics, described by Alfred North Whitehead as the divine madness of the human spirit. If critical thinking involves seeing a problem from multiple viewpoints, then that was exactly the skill students practiced in Prof. Vaninsky's class, where the dry language of linear and quadratic functions was grounded by studying a business transaction from the perspective of customer and retailer. Prof. Cunningham, similarly, sought to make conscious discernment part of students' approach to problem-solving. She gauged the impact of this methodology with a student survey, and as predicted, found that students are indisputably appreciative of faculty's attention to their learning styles and cognitive development, especially as regards algebra, a hurdle for many of them.

Finally, readers will enjoy the journal's coda: two heartfelt exposés of teaching practices that altered the academic landscape not for students, but for faculty. Prof. Figueroa, first, confesses a growing addiction to writing across the curriculum—an affirmation, perhaps, that putting pen or fingers to paper or keys unleashes a mysterious originality. Prof. Bates, in turn, discovered an unknown talent and passion for the theater—and with his use of words like rapt, epiphany, and exhilaration, has presented an account that will stir us all.

FROM THE CLASSROOM TO THE CONCOURSE: STUDYING THE GRAND CONCOURSE TO DISCOVER ONE'S COMMUNITY

Elyse Zucker
William Casari

"I Hear America singing, the varied carols I hear,
Those of mechanics—each one singing his, as it should be, blithe and strong,
The carpenter singing his, as he measures his plank on beam,
The mason singing his, as he makes ready for work, or leaves off work…."
from Walt Whitman's *Leaves of Grass*

Walt Whitman's poem, "I Hear America Singing" inspired the 13 murals painted on the walls of the Grand Concourse U.S. post office located across the street from Hostos Community College. Visited last fall by Professor Zucker's Reading class (English 92) these looming murals helped students more fully appreciate how art enhances the Grand Concourse and, by extension, education illuminates everyday life. The 1860 poem itself celebrates America and its diversity, which 150 year later, still holds relevance for students.

The curriculum implemented in this class—one centered on both teaching and exploring the Grand Concourse—grew out of conversations held between the respective authors of this article: an Assistant Professor of English and an Archivist /Instruction Librarian. It took these English Reading students from vicarious to experiential learning (the former achieved by studying materials and the latter from observing the places studied): an orientation that enabled each of these types of learning to enhance the other. This approach can be seen as a paradigm of what can loosely be labeled a classroom without walls, and as such can be implemented as a pedagogical tool for a variety of disciplines.

English 92 is a developmental reading course structured to help students gain strategies for improving their reading comprehension and speed as well as for passing the CUNY/ACT exam. Students required to take this class often arrive feeling intimidated by the prospect of reading. Keeping this information in mind, the professor designed this reading class to help students connect what they were reading to the world that surrounded them as a way of bringing the reading to life and life to the readings in order to enhance the learning of both content and reading skills.

The students began the unit by reading from a text about the Grand Concourse titled Boulevard of Dreams by Constance Rosenblum, focusing on subchapters from sections called “The Golden Ghetto” and “To Hell and Back” that explain the history, origins, socio-economic status and inhabitants of the boulevard. They were assigned this text, not only in celebration of the street’s centennial birthday, but because it was right outside the classroom window, allowing them to both observe the Concourse and phenomena they were reading about and gain cognizance that time and history have altered the environment.

Students learned that for generations of Jewish, Italian and Irish middle-class strivers this 182-wide tree-lined boulevard of dreams running from 138th Street to Mosholu Parkway represented success, and it existed as one of America’s best main streets. For other Bronx residents like Puerto Ricans and African-Americans, the 4.5 mile Concourse formed a concrete ribbon of racial and financial exclusion. Until the mid-1960s people of color could not rent an apartment on the Grand Concourse. When the Concourse is mentioned today it’s often the glory years that are spoken about, juxtaposed against 1970s deterioration, a downward slide which became apparent a decade earlier (Casari 5).

What happened? A combination of social causes, racial fear and media stories contributed to rapid changes. By the mid-1960s newspaper, television and later film portrayals like Fort Apache The Bronx showed how the Bronx changed demographically, crime increased, and eventually a New York Times story written by Martin Tolchin compared it to a third world jungle, written off by the rest of the city: “Even for a native New Yorker, the voyage across the Willis Avenue Bridge is a journey into a foreign country where fear is the overriding emotion in a landscape of despair” (63). On the heels of Robert Moses’ “slum clearance” and misguided 1950s urban planning decisions, devastating fires and building abandonment came to define the 1970s as landlords realized their properties were worth more for the assessed insurance value rather than relying on rent-controlled tenants. Burning buildings for the insurance money also relieved landlords of the responsibility in making repairs to aging structures that many tenants had stopped paying rent on due to lack of maintenance or financial hardship.

Themes of race and ethnicity played a strong role during this turbulent time in the Bronx and continue to do so today. Many of the residents leaving during the 1960s were white or white ethnics, and many of the newcomers were black, Latino or from other areas of the Caribbean. Many newcomers were much poorer and less educated than the previous residents. Steven V. Roberts of the New York Times highlighted these changes in an article spelling out the population shifts: “In the last decade, Negroes and Puerto Ricans have gradually moved north and west from the ghettos of the South Bronx and Morrisania, looking for better housing in the narrow, well-kept avenues parallel to the Concourse” (28).

During this transition the word “urban” became a code word for black and Latino inner city areas and is used today when describing central city neighborhoods. Integral to this Bronx tale is the history of immigration in America and what it meant to be a white-ethnic or a person of color in the Bronx mid-century and today (Casari 5).

Keeping these themes in mind set the tone for the 29 students in this class to consider what "place" Hostos Community College occupies along this well-known thoroughfare in efforts to harness this rich Bronx history and define their own place in the urban environment and the dreams they have for themselves and their futures.

In addition, Boulevard of Dreams and the other materials used, including three excerpts from Prof. Casari's graduate thesis, Concourse Dreams: a Bronx Neighborhood and Its Future and a novel about life in an Hispanic neighborhood in New York called Bodega Dreams by Ernesto Quiñonez were approached in the context of their relation to the American Dream as represented in the stories of the streets like the one Hostos resides on, and those of East Harlem, the setting of Bodega Dreams. Presenting the unit in the framework of The American Dream made it accessible to all students, whose first assignment was to write what The American Dream meant to them and what they hoped to achieve (The Dream being one shared by Americans for a land that enables life to be better, richer and with opportunities for all of its inhabitants to fulfill their potential regardless of race, ethnicity or social stratum).

Furthermore, the American Dream itself was examined in the context of the different types of dreams one could have: conscious, unconscious, personal and collective, in order to help shed light on how significant and pervasive a role dreams can play in shaping our lives.

While reading about and reflecting upon the American Dream as manifested in New York, students employed many strategies designed to enhance reading comprehension. These strategies ranged from acquiring skills such as deciphering vocabulary from context clues and identifying main ideas, to the reader-response approach to texts, one in which students chose the aspects of the books that interested them and wrote, in letters to their classmates, their reflections upon them (Henry).

Beginning with a focus on the Grand Concourse, the final assignment linked the topic of ethnicity—which students studied as a factor shaping the evolution of the boulevard—with the Book of the Semester: Listening is an Act of Love, by David Isay. This book, which Professor Robert Cohen offered to all classes at Hostos as the heart of a project that included events such as a panel presentation, relays interviews given at StoryCorps, a non-profit organization that records oral histories of everyday people who exhibited extraordinary acts of courage.

Professor Casari visited the 92 Reading class on three occasions and facilitated the Grand Concourse exploration by presenting a set of neighborhood images culled from his graduate thesis Concourse Dreams: A Bronx Neighborhood and Its Future which put students in touch visually with the street right outside the Hostos Campus. Art Deco apartment houses, the Lorelei Fountain in Joyce Kilmer Park, Yankee Stadium, the Bronx County Building and other landmarks took on new resonance as students "connected the dots" between icons of past decades they were reading about and the fact that all of these landmarks are extant. At one point in the presentation two students made a connection between the new Bronx Terminal Market retail shops and the New Yankee Stadium when photographs of these sites were shown—they did not realize how close Hostos was to the new construction. During the slideshow Professor Zucker pointed out the window at the signage and market buildings so that students could see the structures from the classroom.

Students remarked in class and on homework about being surprised at the rich visual environment they weren't previously aware of: colored tile mosaics at the Fish Building on the Concourse, the murals at the Works Progress Administration (WPA) post office, the sculptural details on the Lorelai fountain and the many Art Deco apartment houses lining the Grand Concourse. Slowly students connected the past they had read about in Boulevard of Dreams with the present in which they lived, and were able to see their place in it from a new perspective beyond the campus walls. Most importantly anecdotal student feedback indicated they had become more aware of the built environment which reinforced aspects about the neighborhood fabric and history.

During one class visit Professor Casari distributed brochures from Tree Museum, a public art project by artist Katie Holten that features one minute recordings of various Bronx personalities and historians like Valerie Capers, Peter Derrick, Jazzy Jay and Adrian LeBlanc, among others. The brochure describes the genesis of the project: "The museum-without-walls runs the length of the Grand Concourse from 138th Street to Mosholu Parkway. Visitors can start their visit to the tree museum at any point on the Grand Concourse. Look for the sidewalk markers that identify trees with stories" (Holten).

Students from the 92 class and passersby simply dialed the tree museum number on their mobile phone and pressed the appropriate number for that tree's recording. In this way students became connected to that particular spot and whatever story the featured speaker had chosen to talk about like Bronx history or green roof technology on the Bronx County Building. According to feedback given to the professors, students took advantage of this on their own time and became aware of not only that physical spot but its place in Bronx history. Other students took advantage of dialing the numbers without being physically in front of the tree just to hear the speaker's take on that particular Grand Concourse location. Accessing the Tree Museum's recordings reinforced neighborhood history discussed in class and gave students a new perspective on "place" according to their comments.

The shift from classroom to the Concourse to community as a learning modality seemed to vitalize and enhance both the quality of learning and the experience of it. As we did not employ any controlled studies of this class, the implications are borne out from observations noted about both the work the students produced and the level of enthusiasm they exhibited. Furthermore, the class had a 58% ACT pass rate, approximately 15% higher than the Eng 92 pass norm that semester, according to the summary data for Spring 2009 and Fall 2009 exit tests (Hostos Office of Institutional Research). One student who passed the ACT exam was a multiple repeater and two more students missed passing the exam by one point. Although many factors influence the success and failure rates of exit exams, we hope that the interest sparked by these integrative approaches to reading contributed to the relatively high ACT pass rate.

An example that drew on these shifts is the term project assignment students constructed. Students were required to do research on an aspect of an ethnic group in New York with which they shared roots, and then fashion an interview from questions they created that touched upon their various ethnic and textual explorations. There were, inclusive of Professor Zucker's, 9 ethnicities in the class: Puerto Rican; Dominican; Mexican; Jamaican; Columbian; Haitian; Hong Kongian; Indian and Russian. Creating interviews was an objective students were already primed to achieve; having identified types of questions asked in the book Listening is an Act of Love, and having worked in groups all term to create questions from materials covered in class. Group members then asked these sample questions to classmates in other groups to try them out in anticipation of the actual interview. Most students connected the theme they researched with the topics addressed in class.

What follows is an excerpt of an interview, one that conveyed the influence upon the student of the themes of both ethnicity and dreams:

Student: *What was the dream you had for yourself in coming to The United States?*
Aunt: *To have a better life than I had in India.*
Student: *What did you dream when you slept?*
Aunt: *I dreamed my son would become a doctor.*
Student: *Did your dreams come true?*
Aunt: *Yes.*
Student: *What makes you laugh?*
Aunt: *When my husband walks in a sleep dream.*
Student: *How important are your dreams to you?*
Aunt: *I live for my dreams.*
Student: *My dreams are important to me, too. Do you like the American Dream?*
Aunt: *It's what I dreamed for all my life.*

Some students predicated their questions on the type of queries offered in Listening is an Act of Love: The humanistic construction of this book—one revealing how love, compassion and forgiveness enable people to transcend formidable obstacles--did not pass the students by. It shaped their own interviews to take on a solicitous tone (which having gained awareness of what tone is and how it functions, helped them to control it). For instance, the conclusion of an interview in which a student learns about her Puerto Rican mother's marriage to her now deceased Columbian father ends on this note:

Student: *Are you happy now mami?*
Mother: *Yes, I am. I have you and my granddaughters who each and every day makes my life full of joy and entertainment.*
Student: *Mami, thank you for always being there with me, helping me when I was going through a rough divorce and now for understanding that even though I can't be with you and my daughters 24/7. My thoughts are always with you.*

Students often reflected, in their projects, on what they learned from their interviews. One student said of the interview he gave to his mother, which veered to her courtship with his father in Santo Domingo, "This is a story that makes me realize that maybe someday this can happen to me [as love and marriage.] For a love story I can say this is something that can be in a book…. When I grow old I will have a story for my kids for they can see what can happen with a simple hello."

Marked by precision, relevance and sympathy, the students' interviews were enhanced by the research they had done on both the Grand Concourse and the ethnic groups they identified themselves with, strengthening their schemas and their awareness of influences upon those groups.

This extending of the perimeters of the classroom exemplifies one of several strategies that facilitate learning for the net generation as defined in the text, Educating the Net Generation, edited by Diana G.Oblinger and James L. Oblinger (An Educlause Book: 2005); another strategy used was giving students the opportunity to construct knowledge by incorporating new information into the paradigm the learner already has established.

Using the Grand Concourse centennial as the inspiration for the course helped collapse the academic institution into the surrounding milieu, enabling students to think more critically and contextually in their daily lives. In taking a journey from the classroom to the Concourse, they journeyed, as well, from passivity to active and animated learning and had fun along the way.

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THE WRITING ON THE WALL: CELEBRATING NATIONAL DAY ON WRITING AT HOSTOS COMMUNITY COLLEGE

Andrea Fabrizio
Linda Hirsch

Since its participation in the 1999 CUNY Writing-Across-the-Curriculum (WAC) Initiative, Hostos has sought to foster a campus-wide recognition of the value of writing and its place in the academic, professional and personal lives of both faculty and students. Today, with over 75 Writing Intensive (WI) sections, an appreciation of the connection between reading and writing, ongoing professional development, and WAC principles and practices incorporated into both English-language and Spanish-language courses across a wide range of disciplines, Hostos has made great strides in fulfilling the CUNY Board of Trustees mandate to provide students with frequent and meaningful opportunities to write. As we move forward, the Hostos WAC Initiative is guided by the views outlined in the NCTE (National Council of Teachers of English) report, "Writing in the 21st Century," by Kathleen Yancey. This pivotal report recognizes the shifting roles and demands of writing in the 21st century and points to the prevalence of blogs, wikis, text messages and social networking sites such as Facebook which have changed the ways students learn to write and the ways in which they use writing both inside and outside of the academic setting.

For NCTE, establishing October 20, 2009 as a National Day on Writing was one visible and meaningful way to focus attention on the centrality of writing in our lives and to recognize the variety of purposes and forms this writing takes. It seemed only appropriate that Hostos, a bilingual campus with a college community increasingly conversant with WAC and its place in learning, should participate in this event.

We envisioned the National Day on Writing at Hostos as a day when every person on campus - faculty, administrators, students, staff, security guards, custodians and food service workers - would write. Since we are an academic institution, writing happens on our campus all the time, but on this day, we wanted to move beyond the writing that takes place in the classroom and invite the entire Hostos community to participate in a celebration of writing and to make the campus cognizant of the fundamental role writing plays in our lives. Thousands of people walk in and out of our doors every day; each one brings a story, a perspective, and a voice. We wanted to know what our college had to say.

To create a writing community we planned for two different "walls of writing," one physical and one virtual. There would be three physical walls, 4 feet high and ranging from 12 feet to 30 feet long, mounted in the lobbies of the "A," "B," and "C" buildings. These large wooden boards were wrapped in sheets of white paper with strings for sharpie markers attached to them. The virtual wall was a blog that could be easily accessed from the College's homepage and that would enable those who were not on campus to participate in the day's celebration. On each wall we posted prompts developed in collaboration with the Hostos Writing Fellows to engage the writer:

- What is the best thing you ever read?
- I would like the world to know… (in English and Spanish)
- The funniest thing that ever happened to me is…
- The saddest thing that ever happened to me is…
- The most romantic thing that ever happened to me is…
- The weirdest thing that ever happened to me is…
- What do you wish people knew about you?
- Why are you going to Hostos?
- How do you imagine yourself in 10 years?
- If you could change one thing about NYC what would it be?
- Write in any language you want.

At 9 a.m. on the morning of the National Day on Writing, our college community was greeted by three white walls on campus and a blog open for comments on the homepage. It was slow going initially, but once two or three folks took a sharpie in hand and began writing, curiosity got the better of our community, and the walls were soon crowded with people reaching for pens to leave their mark on the day. Others enjoyed themselves reading and then responding to what others had written. By mid-day all the walls were full and needed to be changed; the second sheets filled up as quickly as the first. By evening, what remained proudly on display was a written cross-section of our college community - its dreams, fears, complaints, achievements, questions, prayers, advice, and even jokes. While the physical wall was filling up with a rainbow of ink, the virtual wall was also abuzz with activity. Throughout the day approximately thirty people used the blog to post longer, more reflective pieces. By popular demand, the walls and blog remained on display for the rest of that week so that folks could read each other's comments and continue to add their own.

As a community, we used this moment to share with the world the things we love and the things that bother us. We used it to give advice to readers or to share spiritual or political beliefs. We wrote in different languages; we wrote to each other. Whether we wrote about our frustrations or our ambitions, we wrote, and in doing so we transformed blank walls of paper and an empty piece of cyberspace into a written mosaic of our college community.

THE WALLS OF WRITING

On the walls in the lobbies, responses were spontaneous, brief, and "social." People reacted to each other and posted notes to and about their friends and families. In response to the prompt, "How do you see yourself in 10 years?" folks wrote:

- Not knowing is the most exciting part!
- Living in accordance to humanity
- Being a dentist
- A really good producer, writer and singer
- With a PhD
- Not here!

The prompts were intended to spark conversation, but many had additional thoughts they wanted to share:

- Can we think of writing as a way of 'righting' things that are wrong …and standing up straight so that we voice our concerns and make this world a better place to live in. R. Cohen
- English is my second language and I am proud to be able to speak both
- When the night seems the darkest it's because the sun is going to come out.
- Regole amore senza regole; Love rules without rules.
- Perseverance is the tool that sharpens how much dedication you are willing to devote to a life's endeavor.
- Thank God for my family.
- Believe in your dreams.
- Thank you God for your son Jesus Christ without him I would not be at Hostos.
- You don't need drugs to laugh and have fun.
- I am a dedicated Hostos student. Hostos rocks.
- The Best thing I ever read is the Joy Luck Club
- I wish to be the best drummer in the world

THE BLOG

Our bloggers tended to write longer pieces as the blog allowed space for rumination and lengthier text. Composing on a computer also allows for more revision and change, and the comments left on the blog reflect this.

"The saddest thing that ever happened to me…" elicited this entry:

The saddest thing that ever happened to me was my being away from my lovely mother. What can I say now? Nothing…I hope I could do something about it but there is no money for a visit just only a phone card…

Bloggers frequently contributed poetry:

First Kiss
You call me your baby so i call you my boo
You pick me up when my feelin are blue
You got a boyfriend but i dont thinks he's your type
Yeah im dog.. so what im friendly i don't bite
I walk you home hold your hand then gaze in your eyes
I think its the right moment, right time so i give it a try
When we kissed …felt like i was the center of the sun
It felt like, New Yearz, 4th of July, and valentine day all in one
When im around i want to be closer when i not around you i want to be wit you
Some times it feel like im a runny nose and you my tissue
What ever problem you facing we could handle tha issue
I know all cuples break up sooner or later so when we do ill miss you
nicquan

Overall, the blogs were forums for sharing innermost feelings and reflections of self, for making the private public.

Thousands of people embraced the walls with an enthusiasm that we could not have anticipated. The success of the day revealed that people relished the opportunity to share a bit of themselves with the world. In turn, people also enjoyed reading the walls and many times replied to what others had written. The real and virtual walls became tangible examples of the deep connection between reading and writing. While people wrote and read, it was also apparent throughout the day that they were enjoying themselves. As one member of our community, Denair, commented on the blog,

"I really enjoyed the sense of community that it brought to the school. It was as if we were all one big piece of work. It was interesting to see the things people are willing to share. Thanks!"

CREATING VENUES FOR STUDENT INTERACTIONS WITH THE COLLEGE COMMUNITY

Flor Henderson

INTRODUCTION

Activities performed outside the classroom environment are in general embraced enthusiastically by students because they are a break in their class routines. In colleges, the importance of extracurricular activities is well established, the primary goal activities being focused at the level of the individual student, and in the broader sense at the college community level.1 Although most of the learning process occurs in class, the campus environment is important in supplying students with chances to become engaged in activities that contribute to their growth as educated citizens. The notion of performing an action outside of the instructor's radar gives students the freedom to make their own decisions, communicate with others, and perhaps find hidden abilities.2 At Hostos Community College students find ways to integrate themselves in the college's tapestry through club memberships, sororities, fraternities, and other organizations that fit their personal styles. Nevertheless, this type of engagement seems to revolve around an exclusive range of activities not leaving much room to interact with community members outside the students' inner groups.

Hostos Community College offers plenty of opportunities for community interactions. Weekly announcements are generated by the Office of Student Affairs through The Link.3 The array of activities is vast; it includes conferences, job fairs, food drives, plays, art exhibits, and many other events that take place on the campus. Yet, this generous amount of activities attracts mostly participants who are directly involved in the organization of the events. Other attendees are those that have been directly invited or encouraged by faculty in their classrooms. 4 As a result, the energy and effort invested by the organizers is not proportionally rewarded by the community.

Creating a campus environment in which students benefit from extracurricular activities requires looking for strategies that facilitate and encourage student participation. My desire to improve student participation in activities organized by the Natural Sciences department began three years ago, when I decided to develop two activities to nurture students' proactive involvement in those events. The aims of the activities were to integrate students in the institution's life by participating outside the classroom settings. In addition, the activities were intended to foster personal skills, such as communication and critical thinking by allowing interaction with other members of the college community. Lastly, the activities wished to foster social conscience to appreciate and value the work of other individuals.

THE ASSIGNMENTS

Two assignments were designed to offer students with opportunities to write about their interactions with other members of the college community. The assignments were prepared to fit two distinct student group categories. One assignment was offered to groups that participated in college events during their instructional hours: they attended either opening ceremonies or guest speaker conferences. This group was required to write a report on the main points presented in the conference. The second assignment was designed for student groups that participated outside their classroom hours by visiting exhibits and poster presentations; they were required to write a newsletter article on selected student work. Both assignments included detailed instructions, guide questions, and a sample to follow. To make the experience appealing, it was rewarded with extra points on their course work.

THE SOURCES OF INFORMATION

The Natural Sciences Department offers yearly college-wide events, the Earth Day Celebration and the National Teach-In in the spring semester and the Departmental Open House in the fall semester.5 During these events the department prepares a series of celebratory activities intended to display faculty and student work to the college community. Poster presentations and lab demonstrations are performed by students on the Bridge. Conferences given by outside speakers are usually conducted in the Faculty Dining Room (FDR). Oral presentations given by faculty and students' collaborative presentations, debates and contests to test knowledge are conducted in large classrooms and are open to the visitors. Movie and documentary shows are shown in classrooms, the FDR, and the library's multimedia room. The events last for a day or two, offering plenty of opportunities for students to participate and accumulate sufficient information to prepare their reports.

THE PRODUCTS OF STUDENT WORK

The majority of students opt to complete the assignment as an investment in extra points. Most of the comments are positive and show their appreciation for their peer's work and understanding of current global events. The following are some excerpts of students' reports: "I really enjoyed the Earth Day celebration. I was well pleased by seeing the different creative posters made by the students to make us aware of the problems surrounding our planet." "The ability of students to have the opportunity to participate and conduct research really struck me. As leaders they will be more aware of their environment and practice the precautions they will need to make a wonderful and safe environment." "One of the major highlights was to see how many students care about presenting their knowledge to the public." "On this day I believe everyone should take at least five minutes of their time to educate themselves about what is occurring around the world." "I believe events like this should be held more often because it does really raise awareness in the reader. I was definitely surprised and amazed at the great deal of knowledge." These responses show us that our activities have a positive effect in students' views, and that our efforts directed to provide them with information outside classroom settings is worthy.

CONCLUSIONS

The practice of collecting students' written pieces is a great tool to assess the impact of departmental efforts in educating the college community. Student reports provide us with evidence to improve activities in future planning and confirm to us that our efforts are appreciated and valued.

As faculty we can create venues to help students in connecting with extracurricular activities by advertising the events and encouraging their active integration in campus life. We can design activities with the community's vision in mind.6 One option is for faculty to disseminate the multiple events that take place in college via Blackboard links, by calling students' attention to bulletin board postings, by encouraging the use of college email addresses, and by giving assignments that encourage interaction with other students or faculty. In this way, we can create important connections with institutional life as well as commend the benefits of extracurricular activities on the professional development of our students. On the personal side, I have received positive encouragement from organizers of the events to whom I give bound copies of student responses as feedback information for future actions and my personal recognition to their work. I have benefited as an educator because I have had the chance to glimpse into my students' perceptions of our efforts to enrich their professional development.

END NOTES

1 State University. com. College Extracurricular Activities - Impact on Students, Types of Extracurricular Activities. <a href="http://education.stateuniversity.com /pages/1855/ College-Extracurricular-Activities.html">College Extracurricular Activities Impact on Students, Types of Extracurricular Activities (Retrieved April 23, 2010)

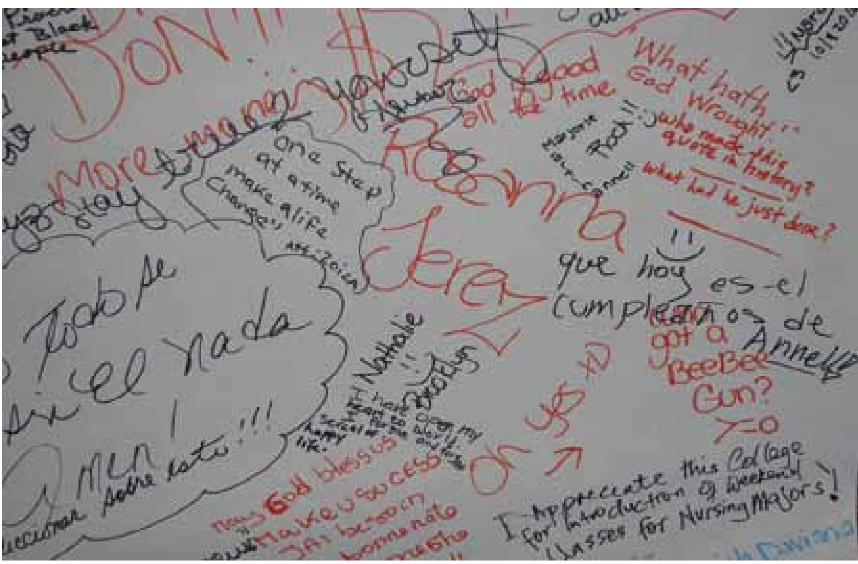
2 Colby, A. T. Ehrlich; E. Beaumont and J. Stephens. Educating Citizens: Preparing America's Undergraduates for Lives of Moral and Civic Responsibility. The Carnegie Foundation for the Advancement of Teaching. A Wiley Imprint (2003)

3 The Link. A Newsletter from the Office of Student Activities. Hostos Community College. www.hostos.cuny.edu/sdem/student_activities_thelink.html (Retrieved December 14, 2009)

4 The audience for events sponsored by the Natural Sciences Department are usually classes that meet at the time the event is being conducted. On other occasions, faculty members who are involved in the organization invite their students to attend on a voluntary basis.

5 The Natural Sciences Department sponsors three events open to the college community: the Earth Day Celebration since 1995, the Open House since the fall of 2007, and the National Teach-In since the spring of 2008. Two faculty members are elected to be the organizers while other departmental members contribute with classroom activities.

6 Lenz B. A Community of Learners: Building a Supportive Learning Environment. Edutopia, What work in Public Education. http://www.edutopia.org/envision-schools-learning-community-respect (Retrieved December 14, 2009)



Writing on the wall at Hostos Community College

COLLABORATION IN THE DESIGN CLASSROOM

Rees Shad

I. THE EVOLUTION OF COLLABORATIVE CONSIDERATION: A PERSONAL JOURNEY

The evolution of my thinking on the topic of collaboration is rooted in my artistic practice as a singer/songwriter. This endeavor has usually involved recording and performing with other musicians in tandem with professional audio engineers and producers. Over time this has taught me a great deal about communication as well as about collaboration. Sociologist Howard Becker was accurate in his description of artists when he described them as working "in the center of a network of cooperating people whose work is essential to the final outcome" (Becker 1). My artistic practice, while often described as a solo venture, has always involved composing and orchestrating pieces of music to be performed by ensembles and recorded by individuals who augment the works with their stylistic approaches to the material. This musical and technical communication is thrilling to experience, and from a very young age I knew that I would make a career of it.

I began working in professional recording environments at fifteen and opened my own facility when I was twenty-two. This endeavor necessitated the development of interpersonal skills far beyond those of a traditional solo artist. Suddenly I was rounding up disparate musicians to perform ensemble pieces composed by complete strangers in as short a time frame as humanly possible. Learning to guide this process to successful fruition meant developing a better understanding of how a diverse group of people might best find common ground and work collaboratively toward a mutually satisfactory end. I experimented with several different roles over the years – from den mother, to dictator, to therapist – and found that encouraging a goal focused active conversation under the more restrained position of facilitator led to some of the most successful recordings I was ever involved in.

Contemporary music from Jazz to Punk Rock is, after all, a conversation between musicians placed into guidelines set up with agreed upon thematic concepts and roles. Each player must understand his or her role in the enterprise and visualize an overarching emotional theme, tempo, and melody in working toward a performance. The audio engineer and producer must recognize these concepts and roles and not only facilitate them but capture them in the most transparent means possible stylistically as well as sonically. In the recording process each player struggles to express individuality while embracing the group experience. Over the next decade I was involved in the process of making hundreds of recordings with a wide variety of artists.

Eventually I became involved in other forms of media production including filmmaking, print, and interactive media design. I quickly recognized that my experiences with collaboration in music production helped me make the leap from medium to medium, and realized especially, as analog systems began to be replaced with digital production techniques, that collaborative abilities were not only a strength, but more and more often a necessity.

As my artistic practice evolved from singer/songwriter to media designer, my professional practice evolved from recording engineer to college professor; my intellectual pursuits brought me back to higher education where I continued to explore the collaborative process. This exploration was not initially a conscious decision, but rather an unnoticed thread in my practical development and exploration of technical communication and the digital arts.

In my initial graduate studies at Rensselaer Polytechnic Institute I began studying media development and usability studies and exploring the role of collaboration in technical communication and usability testing. I then moved on to Parsons the New School for Design, where collaboration was strongly integrated into the curriculum, and it was confirmed for me that groups of computer scientists, designers and artists working together are not only a common expectation in the modern work place, but a necessity in modern media development. Expertise in a variety of technologies and techniques is necessary in the design of successful web sites, video games, animations, films, and audio recordings. Here I found that, due to the complexity of these various technical skill sets, very few individuals can sufficiently cover all the necessary bases.

This resulted in the disconnect between teaching design and offering an arts degree. Many of my Parsons classmates considered themselves artists, and were grounded in a very individual centric production mindset. For them collaboration was an irritating and difficult process to come to terms with. As a result it was often very difficult to establish successful collaboration in this educational environment. Levels of expertise varied, focus and dedication differed enormously between a variety of students devoting their primary energies to unrelated thesis projects, and agreement upon final outcomes would often be overshadowed by consideration of methodology alone – an animator thinking animation to be most effective working with a programmer placing emphasis on an interesting string of code. Essentially common ground was often the last thing on any of these young designer's minds. To make matters worse, I found that the expectation of many of the professors was that we students would be able to hit the ground running when it came to team projects. While there was emphasis on the practice, there was very little attention paid to facilitating students' understanding of the collaborative process in the curriculum.

In my experience there are few activities that have positive outcomes when disparate underprepared individuals are thrown together and merely expected to perform. A truly collaborative process requires prior consideration and discussion by all parties as well as deliberate attention to goals, roles, and accountability. Without these, projects often result in underwhelming outcomes and disgruntled participants.

As I began to teach as an adjunct at Parsons I worked with several of my colleagues to address this issue and prepare our students with grounded collaborative expectations and team building techniques. We began to develop syllabi that not only required collaborative work but also focused on getting the students to consider what collaboration should and could be. We developed projects and exercises that focused not only on organizational issues and methodological approaches toward a common goal, but also on developing intergroup trust and instilling a sense of responsibility in individuals.

When, several years later, the opportunity came for me to develop a design program for The City University of New York (CUNY), I built collaborative process into its very foundation. In recent years, I have been involved in developing programs in Digital Design and Animation, Music Production, and Game Design at Hostos Community College. The programs are attempting to help students aged 18 to 40, coming from a wide variety of cultural and ethnic backgrounds to successfully transition into four-year programs in the digital arts and on to careers in the field of media development.

My colleagues and I work to achieve this by approaching media design from several angles at once. We endeavor to teach stronger computer skills and software techniques, to improve students' communication skills, and to help them gain a stronger sense of aesthetic and visual form by working on real world design problems that mirror professional field experience. Many of the projects are community based/inspired, and are developed for production in cooperative studio spaces where students work together on state-of-the-art computer equipment. Our Collaborative Lab is a place where our more advanced students also volunteer their services as designers and tutors to help other students and other projects reach their maximum potential. This establishment of community within the program is essential to instilling a mentality of collaboration in the midst of vast diversity.

II. REFINING THE COLLABORATIVE INDIVIDUAL

In his writings, Peter Senge has pointed out that the traditional Industrial Age assumption of the competitive individual learning model found so often in academia is outdated and incorrect (Senge et al. 48). While competition can in some cases enhance learning, a healthy balance between collaboration and competition is a more practical model. Today's students – most of whom are members of what we call the 'Net Generation' – have become very comfortable working in teams or with a variety of peers as a result of the pervasiveness of on-line social networking such as Facebook and Ning. In their book Educating the Net Generation Diana and James Oblinger point out that the modern social dynamic now exists physically, virtually, as well as in a hybrid form of the two. Until recently, digital design carried what the Oblingers refer to as 'computer-as-box assumptions,' where the machine has been seen as a mere toolbox or as a conduit for media exposure. But modern student behavior has a perception closer to "computer-as-door, treating the device as an entrance to a social space" (Oblinger 2.12). This phenomenon of the consolidation of social space, media outlet, and design tool is something that our programs have worked to capitalize on in developing our collaborative aspirations. While online communities can be a wonderful tool for facilitating collaboration, however, they bring with them a host of other issues.

While the awareness of the digital social network is more developed, often our students do not come to school with the abilities to utilize this awareness toward more effective group work. Instead, at the outset of their studies, they often exhibit "narrowness of viewpoint, egocentrism, ethnocentrism, and criticism of others' values, emotions, and beliefs" (Senge et al. 204). This is largely due to inexperience and/or immaturity, but it is a definite hurdle to developing a collaborative attitude. The potential for anonymity in the online social atmosphere has often reinforced these behaviors to some degree. Many of our students have been encouraged by their on-line experience to be more aware of social connections but less aware of traditional social graces under the influence of what John Suler calls the "online disinhibition effect" (Suler). Students in these virtual social networks gain a sense of removal from others in the network that allows them to exhibit behaviors such as subtle homophobia, sexism, and racism that they would be less likely to exhibit in face-to-face communication. What Suler calls the 'dissociative imagination,' the 'asynchronicity' of online communication, as well as the 'sense of invisibility' that the medium provides all can end up undermining rather than strengthening the communication afforded by online group work (Suler). Whether inappropriate communications occur in face-to-face collaboration or online, developing student awareness of the inappropriateness of this sort of behavior often requires direct intervention by our instructors. This level of involvement is necessary throughout the initial stages of collaborative process, which I believe must be taught directly and repeatedly in order to become a fundamental element in students' collaborative design practice.

At its core, design is about answering a need; addressing and solving a design problem such as creating a better hammer grip, a more effective print advertisement, or a simpler technology interface. In developing design answers it is essential that we consider the question from as many points of view as possible. Design problem solving has become more and more involved – understanding the end user, testing known precedents and prototype iterations, familiarity with developmental software and codes, communication design, and creating all the various elements that go into the answer all require a wide level of experience that is most often not found in any one individual. A group is now a necessity, and interpersonal skills are all the more important. "Listening, consensus seeking, giving up an idea to work on someone else's idea, empathy, compassion, leadership, knowing how to support group efforts, altruism," Art Costa tells us, "are all behaviors indicative of intelligent human beings" (Senge et al. 204). They are also extremely important traits of any successful modern media design team member.

III. THE COLLABORATIVE TARGET POINTS: GOALS, ROLES, & ACCOUNTABILITY

Teams experience stages in their collaborative development as the members become familiar with one another. The behaviors that Costa lists for us all come into play as teams organize around a common purpose, work through various conflicts that inevitably arise, and become more adept at working as a unit. One of the very first things that I do as an instructor is explain that issues should be expected and that they are a natural element in any group's development. I explain that my primary role during collaborative exercises is to be a group facilitator to help students navigate the process and I then introduce them to an organized three-phase process that will better facilitate their work.

Early on in my career as an instructor of collaborative design I established a set of points that must be clarified by any successful team. Each of these target points act as a catalyst for discussion and initiates collaborative thinking among student groups. They address the project goals, the roles of the individuals involved that will be necessary for the undertaking, and the contract of accountability of each member of the group to the rest of the team in carrying out these varied roles. Each group works to define these roles, goals, and contracts of accountability among themselves in three phases of discussion.

The Goals Phase:

The very first task in establishing an effective collaborative team is to consider what the project at hand involves. In the case of a design project that requires the establishment as a team of what the design problem actually is. What is the question? What is the need? Who is the primary testable audience? The team must then look at what approaches to the problem currently exist, analyze the strengths and shortcomings of these approaches, and from this analysis estimate criteria for success. The team then reaches some agreement as to its approach to the problem (what will their answer be?) and works to establish a system for testing the design with their success criteria in mind. Finally, it is important to draw up a timeline for the project which is as realistic as possible.

When the answers to all these questions are thoroughly considered, the task can be better described and more effective goals can be established. In her book Creative Collaboration, Vera John-Steiner writes that "there can be a more fully realized equality in roles and responsibilities in collaborative activities in which the participants see themselves engaged in a joint task" (John-Steiner 13). Therefore the foundation of the collaboration is built out of mutual understanding of the task at hand. Getting the collaborative team to estimate the problem as well as the scope of the project, and then having the team members verbalize their common goals together is crucial to establishing the following target goals of defining roles and of accepting accountability.

Through this initial phase of establishing the design problem it is of the utmost importance that the participants set the agenda in an atmosphere that encourages creative answers and feels like a safe place for expression. In the earliest stages of the goal phase there must be complete openness to ideas presented and the group must accept that any idea may be the right one. This 'no bad ideas' creative process can often be difficult for students to grasp as their egos begin to come into play. Avoiding competitive personal agendas and/or intense self-doubt at this stage of the collaborative process is essential and often requires the professor's intervention. It is the facilitator's goal to see that group members are listening to one another and that consensus building is underway. In fact, that intervention goes on throughout the process as the professor takes on the role of facilitator rather than authority figure.

When all ideas are on the table, the team can outline design choices, choose its approach, and refine the project in order to better understand what sort of timeline will be necessary - this of course is somewhat defined by course expectations in the class environment. The team can then clarify scheduling concerns according to the timeline, establish effective communications channels, and coordinate scheduling of periodic team meetings. Once this has been completed it is time to move on to the definition of team roles.

The Roles Phase:

It is first important to define the specific roles necessary. We encourage students to sketch out on paper the myriad of actions needed to complete a project and chart them with corresponding abilities that will be needed in order to match them with skills each team member has or is developing. As with the goal phase of the project, the roles must be outlined by the entire group. This phase can often involve the usurping of a leadership role by particularly strong personalities in the team – but this is to be avoided at all costs so that consensus is found and individual participants have investment in the selections made. An assigned role is less likely to be embraced by a participant than one self-selected or volunteered for. Nevertheless, there are often less glamorous duties to be undertaken, and the facilitator encourages these to be split as equally among the group members as possible.

In order to initiate the defining of individual roles in collaborative work it is necessary to understand the skill sets that each member brings to the table. This recognition of members' potential contributions usually comes out of the initial conversations when the group first meets – "Hi, my name is Kareem, I'm a web designer" – or during the outlining of the design solution when varied opinions are introduced with the justification of technical skills or knowledge – "As a film maker, I like to observe people, and I often see people struggling with this element." Even if the team is already familiar with one another, we suggest the team take stock of the group's collective skill sets and experiences in a formal manner. Listing this out on paper assures group-wide understanding of these points.

Once initial roles have been determined, it is important to outline what the roles will involve as specifically as possible and lay out what the team's expectations of each role will be. This stage should be sketched out on paper as well, to confirm that the group is in agreement in regard to the necessary time investment.

Quite honestly, this stage is rife with issues and needs to be carefully overseen by the professor/facilitator. The first blush of enthusiasm involved in a great idea can be intoxicating to the design team, and members often suggest they can do superhuman feats in their personal contribution to the project. The closer the analysis is to true time investment necessary, the faster students will realize that they must look to one another for support in decreasing the individual work load. Only then can the group consider the skill sets of each team member, outline what will be required of each role to facilitate project goals, and then determine as a group which team members most effectively meet the individual role criteria.

When this has been drawn up and consensus has been achieved, the team must come together and agree on how each individual role will fit into the project's timeline as specified by the team. This element of role phase leads students to reflect back to the goals phase as individuals ascertain if the project timeline is still viable or if it needs to be redrawn. The roles phase also foreshadows the accountability discussion about to begin.

The Accountability Phase:

Documentation of the entire process regarding goals and roles gives a strong foundation for initiating a sense of responsibility between the various members of the team. But this responsibility needs to become a formal contract if each member of the team is to recognize their personal accountability to the project and their teammates. It is quite common for inexperienced collaboration teams to be glib about this part of the process – they see it as an obstacle to getting work started. When teams are made up of students that have been in previous collaborative groups, however, where one or more teammates may have been unable or unwilling to follow through on their responsibilities, the glibness fades and the accountability phase of the process has a more considered tone.

This phase begins with the redrawing of an outline of the project in as neat a manor as possible covering each stage of the endeavor, individual duties, and the agreed upon timeline including a schedule of group meetings. Once completed and approved by each member of the team, all individuals sign this document with the understanding that it represents an agreement of member responsibilities.

From here, the project is officially underway, and it is expected that the team carry out consistent team meetings to assess the effectiveness of their undertaking as well as the adherence to the prescribed timeline. This is important in order to successfully complete a project as outlined on time. While it is often the case at this experience level that projects imagined do not always resemble projects completed, the organic nature of collaborative design practice must rely on consensus to be an effective learning experience. Teams will often adjust their accountability document from meeting to meeting as the complex nature of the undertaking is revealed, but unless each member of the team agrees with these changes, collaboration is undermined. For this reason the accountability phase cannot be stressed enough.

IV. DEBRIEFING:

Recognition of team process in its successes as well as in its failure is the final and most important phase of the collaborative process. With each successive team project, most of my students grow to recognize the importance of adhering to the outlined phases and learn to better communicate the necessary elements of the process to one another. Our students improve in collaborative work over time and this engagement is extremely important for preparing them to be successful later in their academic experience as well as their professional careers.

I find that having the entire group fully recognize each of these three points, verbalize consensus in defining each of them, and consider how the points might come to bear on the project is essential to a team's success. If, for example, a team outlines the project goals but does not refine individual responsibilities, some students either take on more responsibilities or avoid them altogether and the accountability of individuals gets undermined. Likewise, if the team does not fully understand what will be the end goals, they can never refine the individual roles to be played. It is essential that the three points be addressed at the outset of an undertaking, and if the projects goals or individual roles shift in the process, as long as the entire group has consensus and understanding of this, the establishment of accountability will not be undermined.

I assign a short debriefing essay at the end of collaboration exercises that asks for each student to consider their team project, its success, its failures, and reasons for both. In addition I ask them to outline for me several points that they would do differently if given the opportunity to go back to square one. This essay is designed to make students consider the process of collaboration more completely, and in successive projects, I ask that they review these previous debriefing documents in order to be more considered in subsequent endeavors.

V. FROM STUDENT TO PROFESSIONAL

In the end this entire enterprise is about influencing students to take on a more professional attitude and prepare them to transition from design students into effective and contributing members in professions where collaboration is no longer merely an approach but a necessity. Students who have worked through this phased approach several times have fewer team-based issues to contend with such as those regarding inter-team communication, individual member contribution, team-wide trust, and establishment of consensus. Project sophistication steadily improves, and in turn the level of professional attitude increases with greater and greater exposure to the collaborative process. From my vantage point as facilitator I see a palpable impact on the students themselves with an increase in acts of altruism and smoother evolution to consensus within groups.

While these young designers may wrestle with finding their individual design voices, they gain a greater awareness of the collaborative experience and how necessary it is to listen – not just to their own aesthetic sensibilities, but also to the opinions and feedback of others. This, in my mind, is the most important skill to master in design, as it builds a foundation for empathy. Design is about connecting the need of an end user or audience with a solution. Without understanding the needs and motivations of the audience in question any solutions created are ineffectual. This is to say that design is not done in a vacuum, but is always partnered with an imagined end user whose voice must be based on the designer's real understanding of an audience and its needs. Students do not become successful designers until they can learn to listen to others with as few personal filters as possible, and collaboration is perhaps the most effective tool I know of for developing this ability.

Furthermore, educating students in collaboration is a powerful way of helping them to build a bridge between the concepts of self as individual and the self as community member. Collaborative practice not only makes students into better design professionals, but also helps them to develop the ability to critically analyze what is going on in the world around them and their relationship with that world. As these students graduate and head off in pursuit of higher degrees and positions in the collaborative world of new media, my hope is that they will take this method with them as a template for social as well as professional development.

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Lorelai Fountain, Grand Concourse. Photograph by William Casari

BUSINESS ETHICS EDUCATION: HOW WELL ARE WE PREPARING STUDENTS TO HANDLE ETHICAL ISSUES AT WORK?

Héctor López

Corporate scandals have rocked the business world in recent years and put business ethics in the spotlight. It is easy to recognize such names as Enron, Tyco, WorldCom, Morgan Stanley, Arthur Andersen, Martha Stewart, and the financial market in general - Merrill Lynch, Bear Sterns, Goldman Sachs, Fannie Mae and Freddie Mac, Citicorp, Bernard Madoff, and American International Group (AIG) as evidence of past and current crises in lapsed or abandoned ethics.

Other events or situations such as not telling the truth about work experience, falsifying résumés, misrepresenting professional or academic credentials, covering up for others, misappropriating company property, personal use of the Internet on the office computer may also be characterized as ethical misconduct. But the major question is do they qualify as ethical dilemmas? From an ethical point of view the answer is "yes."

ETHICS, JUDGMENTS, PRINCIPLES AND VALUES

Ethics can be viewed as the study of the justification of ethical value judgments based on ethical principles. An ethical value judgment is a judgment of right or wrong, good or bad, better or worse, virtue or vice, or what ought or ought not to be done. Justification involves giving reason or evidence for the truth or falsehood of a given judgment.

However, acting ethically is more about clarifying ambiguity than about choosing "right" over "wrong." Recent "ethics" scandals are more about misconduct than about making morally ambiguous or difficult choices. Though the unethical acts of one employee can take down the whole company, the employee's "dilemma" is not necessarily about having the moral framework to know what to do. Instead, it is about the moral courage to do what is right – even if what is right is unpopular, or earns the individual less money or slows down professional advancement within the company.

Ethical dilemmas require courage because they involve morally ambiguous choices between two goods rather than between a good and a bad. For example, the employee who isn't sure whether or not to cover for a coworker must decide which is the higher good – telling the truth, or protecting a friend. In either case, there is likely to be an unpleasant consequence. In general, a dilemma presents an interesting paradox: how to deal ethically with ambiguity.

WHAT IT MEANS TO BE ETHICAL IN BUSINESS

Business ethics today means first recognizing there is no separation between business and ethics. That is, business ethics is not significantly different from medical ethics, teaching ethics, legal ethics, or any other ethical specialty. An examination of various industry ethics codes shows that, regardless of industry, most codes address the same issues: conflicts of interest, gifts, and things like vendor relationships. They may use the word 'customer' in one and 'patient' in another but they are all about doing the right thing because it's the right thing to do.

Second, business ethics today represents going beyond simple compliance to integrity and value-based ethics – bringing together the mission and values of the organization into an integrity and compliance program. The objective is to ensure clear expectations for employees, deliver a high-quality product or service, and serve the community according to the highest ethical standards. Today, companies are moving toward values-based ethics; an indication that more companies are beginning to take ethics seriously.

Companies are re-conceptualizing enlightened self-interest: a commitment toward ethical behavior in business and to study the impact of their activities on local and global communities. Though there is some question about how one identifies socially responsible companies, there are companies that reinforce their ethical standards to a greater extent than others, for example, McDonalds's Corporation, NIKE Inc., Coca-Cola, Johnson & Johnson, and Hewlett Packard (HP).

Responsible corporate citizenship is another example of a stance toward ethical behavior in business. The trend is to tie responsible corporate citizenship to a positive bottom line – what we could call a "win-win" outcome. An example of this principle in action is Fortune 100 Company Marriott Corporation. The company established a "Pathways to Independence" program in the U.S. in 1991 as a welfare-to-work initiative that hires people who are on welfare, trains them in workplace-related skills, and guarantees them a job if they complete the program.

Periodic bursts of pursuing white collar crimes may also signify that we are actually engaged in cleaning it up. While these efforts should not be ridiculed, the perceptions are that these "bursts" of pursuing white collar crimes are far and few in between and have drastically contributed to the current global economic meltdown.

But these crackdowns on corporate scandals should not be ridiculed. While perhaps not yet curbing their depth and breadth, they have contributed to ethics codes that are detailed, understood, and enforced. Enforcement is crucial and vital, for codes are only a first step – companies are judged not solely on their code and commitments but by their leadership, conduct, and practice. Ethical leadership requires strong ethics codes and appropriate disciplinary action when required. The message must be initiated at the top of the management hierarchy and disseminated throughout the organization: ethical violations will not be tolerated or ignored.

Companies are posting their codes of ethics in employment handbooks and publicizing this fact through their public relations media, i.e., the Corporate Annual Report. Furthermore, they are posting the codes on their websites and around their offices. Companies want their employees and their customers and suppliers to know that they have standards and will act on them.

Essential to this critical step is the fact employees must believe that if they report some code violation to the company there will be some action taken. Employees must have confidence that somebody is going to do something about what they report without fear of the whistleblower syndrome – retaliation. The most noteworthy example is the NASA space engineer, Roger Boisjoly, who lost his job after expressing major concerns about defective rubber O-rings sealing rocket booster stages that led to the crash of the Space Shuttle Challenger in January 1986.

IMPEDIMENTS TO ETHICAL BEHAVIOR

If it is true that companies have been taking ethics seriously for at least a decade, then why do violations continue to occur? Contrary to what one might suppose, it's not a simple case of effective business ethics conflicting with effective competitive behavior as taught in business programs. It seems more a function of imperfect awareness and judgment about what requires an ethic-based response, combined with underdeveloped skills in recognizing and responding to an ethical dilemma and ethics-based situations. The following are two examples of impediments to ethical behavior:

- Not recognizing certain situations as ethical challenges. When students do not recognize issues as ethical dilemmas, they have no framework to think about them outside the sphere of their own experience or opinions. The challenge therefore is to focus on helping students recognize that troubling situations are often troublesome precisely because they contain ethical challenges.
- Going along to get along is another impediment to ethical behavior. Good ethics are not just a function of 'good character' but also of learned skills. Most individuals assume that people of 'good character' will automatically act ethically no matter how difficult the situation. This ambiguity is the kind of situation that makes ethics interesting, not the kind of thinking of ethics in terms of front-page corporate scandals.

MAKING A U-TURN IN BUSINESS ETHICS EDUCATION

Business educators are expected to prepare students to be competent employees and managers. They are also expected not only to instill an appreciation for ethical behavior in their students, but also to convey a sense of ethical and social responsibility. How can we do this effectively? Can ethics be taught? If yes, how do we teach students about ethics and ethical reasoning?

The general philosophy is that you can't teach ethics but you can teach ethical reasoning. There isn't a one-to-one correlation between ethical reasoning and ethical behavior. Preaching ethics in the classroom turns students off by ignoring the complexities of ethical situations. Business educators need to realize that developing in students the ability to successfully reason through challenging ethical dilemmas requires a combination of exposure to and duplication of ethical role models, knowledge of universal ethical principles, and a framework for making decisions.

No one disputes the influence role models can have on one's psychosocial development. Role models are just as important in moral development. These role models can be individuals or companies that are known for having high ethical standards and for doing the right thing if and when they fall short. Just as leaders shape the culture and ethics of a firm, so can educators serve as role models and exercise an immense influence in the moral development of their students.

Ethical decision making additionally relies on universal ethical principles for two main reasons. First, they express the most deeply held convictions of an individual. Second, ethical principles play an important role in the effort to arrive at a decision about what is best in a given case.

The following widely shared ethical principles or "rules" may help students in making decisions when faced with personal ethical conflicts or dilemma: honesty, the 'do no harm' principle, fidelity, autonomy, confidentiality, beneficence, reparation, self-improvement, gratitude, and the principles of lawfulness (justice). Applying the principles in a given situation helps students determine what their ethical convictions demand of them.

Teaching students to reason through ethical dilemmas involves having them examine four factors: identification of the issues involved, outlining facts, alternative courses of action, and consequences of a selected course of action. Of the four factors, generating alternative courses of action is often a sticking point. Many students tend to stop exploring options after the first or second option. For this reason, instructors need to encourage students to brainstorm as many options as possible, options that are grounded in sound ethical principles. The key is to create a safe setting for discussion and to be as respectful as possible of the ethics and values that students themselves bring to the classroom environment.

There is no reason to believe that the increasing importance of business ethics and ethical behavior will relent. The consensus among business leaders and academicians is that ethical behavior and reasoning can be taught.

STRATEGIES FOR TEACHING BUSINESS ETHICS ACROSS THE CURRICULUM

Educators at large constantly struggle to overcome curriculum and resources constraints to prepare students for everything within their specific academic program. The logical question to ask is whether the content of an ethics course aligns with the content of the ethical challenges students will face. While a strong case can be made supporting the mastery of classical approaches to ethical analysis, the touchstone for deciding what to include in a business ethics course or curriculum should reflect practicality and applicability as well as critical thinking. To build student awareness of ethics in real-time situations, both a conceptual foundation and ample interactive case practice is required.

An effective way for students to explore the impact of ethical decision making in business classes is through case studies. Cases provide illustrations of real people, companies, and problems, and the reader participates in decisions that business people make on a variety of real problems. In discussing the case, students have an opportunity to:

- Observe that the actions of one individual can have significant and long-term repercussions or consequences
- Scrutinize a corporate code of ethics and its viability
- Examine the importance of good personal decision making and accountability
- Consider the importance of organizational culture in determining values and corporate responsibility
- Develop a checklist of trouble signs in a personal decision as well as in a corporate decision
- Discuss the long-term financial, management, and marketing implications of the original decision and options examined

ETHICS COURSE, CASES, AND SCENARIOS AT HOSTOS

There has been considerable debate about whether business ethics should be taught as a separate course or whether it should be integrated into all business and liberal arts courses. Based on research and recommendations, this is not an "either/or" question. The consensus appears to be that it is valuable to teach business ethics as a separate course, and such a course should include a discussion of philosophical and analytical frameworks as well as coverage of ethical issues that include both societal and personal ethical dilemmas that students may face.

While ethics cases and scenarios are an integral part of the Business and Accounting curriculum at Hostos, the depth of a Business Ethics course, however, is far greater than what can be covered in basic business or accounting courses. Our BUS 110, Business Ethics, is a survey course that examines the origins, principles, and practices of business ethics within the context of the work environment. Students examine, analyze, and discuss ethical issues concerning consumerism, civil rights, ecology, technological change, cyber ethics, and social responsibility from a moral and philosophical perspective. The course is designed to assist the student as a potential business person to make informed ethical decisions on a daily basis. Topics developed in class cover contemporary conceptual frameworks for business ethics, the corporation in society, business in its diverse moral contexts, marketplace and workplace issues, and the moral manager. Inherent in the course is the in-depth analysis of descriptive and interactive case studies of unethical decision-making in business. These scenarios help the instructor focus on the following end-of-course objectives for the students:

- Explain how individuals develop their personal codes of ethics and why ethics are important in the workplace

- Identify and recognize ethical issues in business and the work environment
- Understand and relate the relationship between ethics and social responsibility
- Select, articulate, and defend choices in making ethical decisions
- Examine and evaluate the consequences of their decisions on business and society

This Business Ethics survey course is also available to students from other disciplines that wish to develop an appreciation and knowledge of the framework and practical application of ethics to organizational and personal ethical dilemmas.

SUGGESTIONS FOR EDUCATORS

The following suggestions are offered as a way to begin addressing the ethical concerns of society and organizations that wish to see colleges and universities do a better job of preparing graduates for the realities of work. The complexities of globalization, concurrently with the need to leave behind a world in as good shape as the one we found (called sustainability), will dominate strategies and actions of business and government leaders in the coming decades.

The first suggestion is that students should be educated about codes of ethics. This can be approached from two directions. First, students should learn about the development and implementation of organizational codes of ethics in organizations. Students also need to learn about the importance of managers' role-modeling of ethical behavior if a truly ethical culture is to be created in an organization.

Secondly, those students who are studying in professions where professional codes of ethics have been created should be exposed to their professional code of ethics as early as possible. In other fields of study, students might discuss what a code of ethics might be like for their particular profession. Students should be encouraged to think about how to prevent unethical behavior, and how to handle the result of unethical behaviors once they occur.

Finally, it is suggested that educators also think beyond the classroom in teaching about business ethics. This might include setting up panel series on ethics in the workplace. Or, it might include hosting a conference on workplace ethics and encouraging students' attendance. Speakers can also be invited into classrooms to discuss their organizations' codes of ethics or to speak at colloquia. Students can also be encouraged to form an ethics club with faculty support and supervision. These suggestions might help bridge the gap when it comes to preparing our students for the realities of the work environment.

SUMMARY

The realities of work are a given: students will face troubling and challenging work situations that pit one ethical good against another. These situations are also excellent training grounds for dealing with the dilemmas individuals may face as managers, supervisors, or entry-level employees.

Companies have an acute interest in students demonstrating not only their technical expertise, but also their qualifications in tackling tough ethical issues.

They are looking for these qualifications in ways they did not five years ago because, in light of recent scandals, these are the qualifications that interest top corporations.

Business educators who can help students recognize which situations call for an ethics- or values-based response, and who can help them acquire a sense of what it means to act ethically, will serve students well. They will be at the forefront in preparing business students to manage organizations in an ethical manner. For students the real ethics question is not just "What do I do?" but "What do I become if I do this?"

Companies and educators agree that there is a need to improve business ethics education as one way to prevent the excesses of the past decade from continuing to occur in the future. One day soon today's students will be our bankers, lawyers, accountants, teachers and college faculty, business leaders, mechanics, doctors, and elected officials. As educators we must step forward and meet the challenge of preparing our students to behave as responsible professionals.

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Bronx Terminal, Photograph by William Casari

QUESTIONING CLICHÉS: GENDER ANALYSIS IN HISTORY

Ernest Ialongo

For Women's History Month in 2010, I was asked to discuss the use of gender analysis in the teaching of history. I immediately asked myself exactly how I use gender analysis in my classes, and what I use it for. This of course led me to a broader question: what are the goals of my history classes?

Clearly, part of my job, as I see it, is to provide historical content to my students, in a well organized, coherent, and comprehensible fashion–finding the right balance between too many names, dates and events, and not enough, finding a way to explain how ideas are born, how they evolve and how they are put into practice. This is the purpose of my lectures.

But history is so much more than a collection of facts. History is a recounting of the past, which is forever changing, as new generations of historians ask different questions, and use different methods and sources, in order to get closer to a more objective view of the past – one where all participants are given their due. Thus, the other goal of my classes is to get beyond the facts, to understand the construction of historical narrative.

Here, it is the critical thinking skills of my students which I seek to harness. I want my students to interrogate history. Knowing what happened when and to whom is not enough. We need to know how history is written. What is emphasized, and more importantly, what is left out of an historical narrative. What are the broader goals of the historians involved?

This is achieved through the various informal and formal written assignments that I have in all of my classes, and it is here wherein gender as a means for critical analysis comes in. One can always uncover an alternative view of the past by using the triumvirate of race, class or gender as avenues of critical analysis. But for our purposes the latter is the subject of my paper.

I want to briefly describe two assignments that I have my students do that calls on them to bring a gendered interpretation to the texts they are reading, and provides for a consequently richer understanding of those texts. The first assignment, which my students in US History, Part I, do, is a critical reading of the Declaration of Independence – questioning its universal themes based on the reality of those excluded from its promises, and then seeing the long term consequences of this tension – seen in the birth of American Women's Rights movement. The second assignment, done by my students in Modern World History, investigates if the Industrial Revolution did in fact lead to a sexual revolution for women, and how that story is told has much to do with how contemporary events strongly influence historical narrative.

In discussing the Declaration of Independence, it is always tempting to view it as simply the culmination of the American struggle against British exploitation, against the British threat to American's natural rights of life and the enunciation of universal principles which other peoples subsequently latched on to – for instance in the French Declaration of the Rights of Man. Certainly, the universal themes of the Declaration need to be understood, and thus I have my students closely read the critical paragraph that begins:

> *"We hold these truths to be self-evident:*
>
> *That all men are created equal; that they are endowed by the Creator with certain unalienable rights; that among these are life, liberty, and the pursuit of happiness; that, to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, and to institute new government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness."*

In class discussion, the universal themes of equality, natural rights, and the right to rebellion are highlighted from the document. But then, we move on to the problems of this document. Often times a student will ask, "How can we take this document seriously, when it talks about equality and freedom, and yet America had slaves?" And, just as importantly, someone will question how women fit into this document.

To investigate the position of women in the Declaration, I have my students read selections of letters between John Adams, one of the nation's Founding Fathers, and Abigail Adams, his wife. These letters were exchanged just prior to the issuing of the Declaration of Independence. The goal is to show that even at that time women recognized that in a struggle for freedom and equality, in the birth of a new nation, the fundamental inequality of men and women in American society had to be addressed. Abigail Adams pointedly told her husband, who was then in Philadelphia pushing for independence, that:

> *In the new code of laws which I suppose it will be necessary for you to make, I desire you would remember the ladies and be more generous and favorable to them than your ancestors. Do not put such unlimited power into the hands of the husbands. Remember, all men would be tyrants if they could.*

John Adams' response was telling, and highlights the fear the Founding Fathers had that in challenging the authority of the British crown all bonds of authority could be questioned. He wrote "our struggle has loosened the bonds of government everywhere," that children were challenging their parents, students their teachers, slaves their masters. "But," he continued, "your letter was the first intimation that another tribe, more numerous and powerful than all the rest, were grown discontented." He dismissed Abigail's concerns, and argued that however the law defined women in society, and it was clear he did not envision them having the same equality that was soon to be announced in the Declaration of Independence, their pre-eminent role in the family would never be challenged by men.

This sequestration to the home was intolerable to Abigail, and it would become intolerable to an increasing number of women in the ensuing years. The claim that equality was the foundation of American society sounded less and less convincing in the face of women's persistent second-class status in American society. The result was the Declaration of Sentiments, released in 1848, at the birth of the American women's rights movement in Seneca Falls, New York, by Elizabeth Cady Stanton and Lucretia Mott.

Stanton and Mott demanded that America must be true to the universal principles of equality and natural rights that the country was founded on, and as such they purposely crafted their document on the Declaration of Independence, pointedly emphasizing the inclusion of women and their rights in a male-dominated society – pointedly emphasizing as well that the male exploitation of women paralleled the British exploitation of America as detailed in the Declaration of Independence. They wrote:

> *We hold these truths to be self-evident: that all men and women are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty, and the pursuit of happiness; that to secure these rights governments are instituted, deriving their just powers from the consent of the governed. Whenever any form of government becomes destructive to these ends, it is the right of those who suffer from it to refuse allegiance to it. . . .*
>
> *. . . [and] when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their duty to throw off such government, and to provide new guards for their future security. Such has been the patient sufferance of the women under this government, and such is now the necessity which constrains them to demand the equal station to which they are entitled. The history of mankind is a history of repeated injuries and usurpations on the part of man toward woman having in direct object the establishment of an absolute tyranny over her. To prove this, let facts be submitted to a candid world.*

What followed was a list of grievances as weighty as the original list the colonists had used to justify their independence from Britain, and proved that women had been systematically relegated to second-class status in American society. These grievances included: the denial of the right to vote, that women were subject to laws they had no hand in shaping, that when married women lost all legal identity, that women had no guaranteed right to independent ownership of property, or to the wages they earned, that the laws compelled a women to obey her husband, to recognize him as her master, that society denied women profitable employment, reasonable pay and the ability to achieve advancement through education, and had created a double-standard of sexual morality, by which women were chastised for behavior which was broadly tolerated for men. They concluded:

> *Now, in view of this entire disfranchisement of one-half the people of this country, their social and religious degradation—in view of the unjust laws above mentioned, and because women do feel themselves aggrieved, oppressed, and fraudulently deprived of their most sacred rights, we insist that they have immediate admission to all the rights and privileges which belong to them as citizens of the United States.*

And thus, my students arrive at the founding document of the American women's rights movement through a critical, gendered analysis of the Declaration of Independence.

Another assignment I like to use to sharpen critical thinking skills through gender analysis is an investigation into whether the Industrial Revolution led to a sexual revolution in women.

I prepare my students first with a lecture on the basics of the Industrial Revolution, highlighting that the new industrial economy necessitated and led to large-scale migration from the countryside to the cities, both to take advantage of the economic opportunities in the new industrial cities, and to escape economic hardship in the countryside. Having established the basic facts, I bring my students into a deeper conversation about one of the more controversial aspects of the period. Why was there a spike in illegitimate child births that happened at the same time as the Industrial Revolution? I have my students read two articles which directly address this issue, for which my students write me a paper, which we then discuss in class.

My goal for this assignment is to highlight how different assumptions about women's motives can lead to fundamentally different conclusions in this debate, and how the debate can be influenced by the era the historians were writing in. Edward Shorter argues there was a sexual revolution. His explanation for the jump in illegitimate child births is fairly straight-forward. Women, he argues, had traditionally been the subordinate, powerless members of their families, whose role was simply to obey their fathers or, later, their husbands. They were also held hostage to the strict moral codes of the countryside. However, he continues, the experience of the industrial revolution led to an empowerment of women, especially young, single women. Women were now making their own wages, living away from their families in the cities, and living amidst a working class population that reinforced this new sense of independence and freedom. This new found freedom expressed itself in a desire to challenge traditional taboos against pre-marital sex, and, in the absence of readily available contraception, the result was a pronounced increase in the illegitimate birth rate.

Students generally enjoy Shorter's explanation, especially as it seems to make so much sense—that is until they read a response to Shorter's piece drafted by the early giants of Women's history: Louise Tilly, Joan Scott and Miriam Cohen.

Tilly, Scott and Cohen argue that Shorter is wrong on all counts. They point out that women were not so subordinate or exploited as Shorter argues. They, in fact, were integral and respected members of the family economic unit. As such there was no burning desire to "escape" the family and the countryside. Women went to the cities to work so that they could send money back to their families. Moreover, they argue, Shorter's claim that women could live on their own in the cities and enjoy their new found freedom is simply not true. They show that women could not possibly live on their own, as they were not paid enough. Moreover, most women lived in dormitory-type settings where their behavior was closely monitored, or, if they were housekeepers, they lived in their master's home. Neither one of these options allowed for the sexual escapades that Shorter assumes took place. Yet, what is their explanation for the rise in illegitimate child births? They argue that women, far from trying to break away from traditional family ideas, tried to re-create them in their new urban environment. The combination of loneliness and the economic impossibility of living on their own compelled many women to seek out potential mates and to build a new family. And, as was the custom in the countryside, a promise of marriage legitimated-pre marital sex. However, in the volatile economic marketplace of the city, where jobs were frequently changed, and in the absence of traditional cultural and familial pressures that forced men to keep their promises of marriage, many women were abandoned.

By this point the students are generally in agreement that Shorter's analysis relies too much on assumption, and not enough on real statistical evidence, as Tilly, Scott and Cohen do. This consensus is deepened when I ask them exactly what type of evidence Shorter uses, and they realize his sources are all older, wealthy men in positions of authority who did not have any real contact with young, single poor women, and thus could only record their impressions of what these women did and why they did it—that is, that these women were engaged in sexual liberation.

But an issue remains. Why would Tilly, Scott and Cohen so thoroughly discount the notion that at least some women took advantage of separation from their families to explore new forms of liberating behavior, especially when their article was written in the midst of the women's rights movement, when sexual liberation was an integral part of women's empowerment?

It is through a discussion of this issue that the students come to realize that Shorter's emphasis on a sexual revolution is actually a bad thing—that he himself viewed women's sexual liberation during the Industrial Revolution, and likely during the 1960s and 1970s, as irresponsible. Moreover, students come to realize that Shorter is perpetuating the long-held myth that women are ultimately motivated by emotion, and not reason, and thus the negative consequences of their actions—an increase in the illegitimate birth rate. As such, students also realize that Tilly, Scott and Cohen's narrative that argues women made reasoned decisions throughout their lives, and never emotionally-driven, irresponsible ones—that they went to the cities to help, not escape their families, that they sought to create stable family units in the cities, and not simply engage in mindless sex—is not just a response to Shorter. It is a broader response against a mindset that relegated women to the margins of history, which they themselves were challenging, and in the process putting women back into history as active participants.

To conclude, with these two assignments I use gender analysis in my history classes to strengthen my students' critical thinking skills, skills which are vital in understanding how history is written, to determine what is behind and between the words. But these skills are not just relevant in the history classroom. I want my students to be able to interrogate all narratives and explanations. I want, in the end, for my students to have what the college promises them in the "Students' Guide to General Education at Hostos": the skills to be an effective member of local, national and global communities; and one of the ways to achieve this goal is to engage the world in an open minded, informed, and critical fashion. And this is where the history class plays a critical role.

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TALKING UNTIL WE ARE "FLU" IN OUR FACES (TAKING MICROBIOLOGY FROM THEORY TO REALITY)

Julie Trachman

Over the years of my teaching microbiology courses at various levels, I have frequently incorporated information regarding relevant current microbial issues – often taken from newspaper articles and / or television news reports such as New York Times reports regarding the 1999 West Nile virus outbreak in New York City (Jacobs). Prior to my experience with Writing Intensive (WI) biology courses, these microbiology-oriented headline topics were relegated only to discussion. After my experience of teaching a WI introductory biology course and while developing my WI microbiology course, I made it a habit of incorporating writing assignments based on N.Y. Times articles (or similar news articles) into the course assignments such as an article on the death of a woman in her 40s in Brooklyn from meningitis caused by Neisseria meningitidis (Pérez-Peña) – initially as extra credit assignments and subsequently, as required assignments. I chose assignments and reading material judiciously, wanting students to explore microbiology principles in the context of pertinent microbial infectious diseases agents such as enterohemorrhagic Escherichia coli (the spinach outbreak in fall 2006 [Gardiner]), the lethal methicillin-resistant Staphylococcus aureus (that killed the seventh grader in Brooklyn in fall 2007 [Hu and Kershaw]) and N. meningitidis (every semester when our students register they are asked their vaccination status against this microbe). Having students read and write about articles relevant to their course material is in accord with writing to learn goals (Bean 2; Elbow 1; Paul and Elder 2) and General Education principles (AACU 12). All of this was done with the hope that students would take this information into their future course work and future careers and perhaps even have an effect on their personal choices such as getting vaccinated against one of the most notorious and feared causes of meningitis, the bacterium N. meningitidis.

However, this past semester of fall 2009 was different. I had a real mission here. In all of the years I had been teaching, never before had we had to deal with a flu pandemic in the here and now (New York City outbreak in April 2009 [McNeil A1]; flu pandemic in June 2009 [McNeil and Grady A12]). And most of us have no personal memories of just how terrifying a flu pandemic can be. The flu pandemic of 1918 resulted in the deaths of an estimated 675,000 Americans and more than 20 million deaths worldwide (Tortora, Funke & Case 694). More recent pandemics resulted in a smaller number of deaths but these numbers are still significant: 70,000 deaths in the U.S. in 1957-8 and 34,000 deaths in the U.S. in 1968-69 (Tortora, Funke and Case 371).

In discussing during the first couple of weeks of class, the emergence of the swine flu with my Bio 310 Microbiology and Bio 230 Anatomy and Physiology 1 (A & P 1) students, it became readily apparent that many misperceptions were held in abundance and many students were reluctant to even contemplate getting one or both flu shots for themselves and / or family members. Some students, who were working in the health care industry as nurse's aides and in health clinics, were even willing to risk their jobs. Early in the semester it had been mandated by New York State that all health care workers needed to be vaccinated by November 30, 2009 (the mandate was eventually revoked). Many students did not realize the rationale for the need for two separate shots, not knowing that the seasonal flu strains were immunologically different than the swine flu strain. Several students countered that they would get the flu if they got vaccinated – claiming that they got the flu when vaccinated previously. Others were suspicious of the swine flu vaccine because the virus was "new" and the swine flu vaccine, therefore, was "new" too even though the flu vaccine industry had years of experience preparing the seasonal flu vaccine. After the vaccination campaign started in Oct. 2009, some students voiced concern about side effects of the flu vaccine, having heard on various news programs about paralysis occurring in some recently vaccinated individuals.

We were dealing with wrong notions that had to be dispelled as quickly as possible since many our students fell into the age group of those most at risk (in their early 20s) and many had children at home (also considered a high risk group) and some of my students were even pregnant, making them that much more vulnerable to the ill-effects of the swine flu virus. Furthermore, it was difficult to ensure that students who became infected with the swine flu would stay home and not risk transmitting it to their classmates or to the faculty and staff.

Our students are a heterogeneous group of students with respect to their ethnicity, with many being Hispanic and African-American. Many students and / or family members are recent immigrants to the United States; therefore, attitudes about Western medicine may vary. Scientific educational backgrounds of students in these pre-Allied Health Science classes also vary considerably, with even a few students coming back to school after working in non-science fields. Therefore, I considered the problem here to be primarily an education /awareness issue regarding the value of vaccination, in particular flu vaccination. If this were a simple matter about a limited outbreak, I might have just given my microbiology students an article or two and let them write something up. However, this was a serious issue pertinent to the entire campus because vaccination does not just protect the one who was vaccinated – vaccines protect the many via the process of herd immunity (also known as community immunity).

With the cooperation of all of my microbiology colleagues (and considerable able assistance from Prof. Katherine Neuhoff), we took advantage of the Natural Sciences department's Open House to provide students an opportunity to hear in-depth information about the various forms of the flu, how the flu virus replicates, and why vaccination is needed. Just having students hearing about hand washing with or without antisepsis (i.e. alcohol in the hand lotions) and how to cover one's sneezes so the flu virus does not spread through the air, was really inadequate in our minds. Our goals included increasing student knowledge about the differences between swine flu and seasonal flu, the underlying reasons why pandemics arise and about the protective role vaccines have. Two 1 ½ hour-long presentations were held that week.

The first session was held on Tuesday evening of Nov. 17, 2010 with a mix of approximately 70 students, primarily microbiology students from my WI microbiology class and Prof. Neuhoff's microbiology class. A few students from the other microbiology classes were there as well as a smattering of students from my A&P 1 class.

Prof. Neuhoff had prepared a handout containing numerous diagrams and tables that gave us a jumping-off point to talk at length about the structure of the flu virus, how the flu virus replicates, and the two mechanisms behind its incredible ability to change its immunogenic characteristics (its antigenic variation) leading to the ability of the flu virus to cause pandemics. This allowed the two of us to segue into discussion about the seriousness of previous flu pandemics and how the 2009 flu pandemic could be have a different outcome than others because of the availability of the swine flu vaccine. We also discussed with them honestly the potential pitfalls about the swine flu vaccination, since rumors had begun to surface about this swine flu vaccine causing paralysis. We made the students aware that a particular type of paralysis (as a result of Guillain-Barré syndrome) had been associated with the 1976 flu virus vaccination campaign (Cheng); however, this paralysis could also occur as a result of infection with the flu virus itself and infection by other viral and bacterial agents.

The second session held on Friday Nov. 20, 2010 had more A & P 1 students in the mix (as well as 2 professors in attendance at least part of the time). All told there were probably about 50 individuals in attendance for the Friday sessions. This time, however, I was the sole lecturer. Sizing up the different nature of the crowd, I ended up only somewhat relying on the handout prepared by Prof. Neuhoff. Therefore, in part to accommodate the larger number of A &P 1 students, I spent more time on the basics of viruses and less on the specific details of previous flu pandemics. I wanted these students to get a sense of why the flu virus is so different than other viruses and how this relates to the flu vaccination strategy being used today.

My WI microbiology students had two subsequent required assignments focusing on the flu and my A&P students were told ahead of time they had an opportunity to write about what they learned by attending the talk itself as an extra credit assignment. The handful of submissions I received from my A&P 1 students indicated that they did learn something useful about the flu from attending the talks, such as who was most at risk for having serious infections with the swine flu as compared to the seasonal flu and they now had some understanding of what a virus is and how it replicates. However, my primary intent for these talks was that I wanted to ensure that my microbiology students were giving much more serious consideration to flu vaccination and that in doing so they were deepening their understanding of the underlying microbiology principles like herd immunity and the nature of antibody – antigen specificity. To enhance their learning, my microbiology students had received 3 news articles on the flu (Calmes and McNeil A1; Zimmer D1; Neersgard) prior to the talk. Soon after the talk, I asked the microbiology students in one of the assignments to relate what they learned in the talk to textbook content on the flu virus and immunology principles (Tortora, Funke & Case) and news article content. I also asked them about their position now on the flu vaccine and asked whether their position changed from the beginning of the semester and if it had why.

In the second assignment, I asked the microbiology students to apply the terminology appearing in the epidemiology chapter (Tortora, Funke & Case) to the flu wherever relevant, providing them with some guidelines. I can not assess how useful the talks were for those students from the other microbiology classes although I was told anecdotally they found the talks interesting. From my students' essays, I could tell that the flu talk and other information provided to them had some value – to themselves and to us (society). Granted some students were still reluctant to become vaccinated; however, they seemed to be considering the ramifications more intelligently. A few of the students were much more willing to be vaccinated and indeed in some cases had recently become vaccinated were even now encouraging family and friends to become vaccinated. Again, to reiterate, the value was to the students and to us (members of society) – and many of the students themselves now recognized this point. To quote from the essay of one of my microbiology students:

"When I first started this class not me or my son had ever been vaccinated for either the influenza or swine flu, but with the knowledge that I have obtained during this semester, it has enlightened me and from now on I will definitely make sure that me and my son get vaccinated every year. I understand now, how important it is to be vaccinated, not only for me and my family but the whole community. For the more of us that are vaccinated the less opportunity the virus has from spreading, a phenomenon know[n] as community immunity. That is because the vaccinated individuals protect the unprotected ones by stopping the chain of transmission in its tracks and drastically lowering the probability that the unprotected one encounter the virus."

(excerpt taken from essay of my former microbiology student, Ms. Julissa Lopez, submitted Dec. 2009 and reprinted with her permission)

At last count as reported in Dec. 2009 (McNeil A26), there have been close to 10,000 deaths in the United States attributed to the swine flu pandemic since April 2009, and with approximately 213,000 sick enough to be hospitalized and approximately 50 million infected. How many more will be added to these numbers, it is impossible to know. We do not know if there will be a third wave of flu infections this coming January (January 2010) as had occurred in the 1918 and 1957 pandemics. Of course, we have the availability of modern medical technology to help those who become infected and who might require hospitalization. We are also fortunate in that we do have one chemotherapeutic agent, Tamiflu, in our arsenal, which at least for the moment still works against this swine flu strain. However, as mentioned previously, this virus undergoes antigenic variation. The same underlying mechanisms that can lead to changes in immunogenicity can make the virus resistant to Tamiflu or more lethal.

As of December 2009, only about 50 million Americans are vaccinated (McNeil A26). But hopefully, because of the aggressive vaccination campaign that has already occurred and further education of our public, an even larger percentage of individuals will become vaccinated. That, in reality, is our best recourse – because of the afore-mentioned herd immunity. And in all likelihood given how the flu virus undergoes antigenic drift, which lead to subtle changes that accumulate over time and how infrequently the flu virus goes through dramatic antigenic shifts, the swine flu vaccine that is now being used will offer us some protection for some years to come as variants of this swine flu circulate in the human population. We can hope that people will think of not just themselves but others as well and become vaccinated, so that the tragedies of other flu pandemic will be averted where many thousands had died in the U.S. alone.

Addendum: As of April 2010, there have been approximately 12,000 deaths in the U.S. attributed to the 2009 swine flu pandemic (McNeil A13). During the winter months of 2010, there were very few reported cases of swine flu; however, in the last month, there has been an upsurge in swine flu cases in southeast U.S. The Centers for Disease Control (CDC) has expressed concern that there might still be a third wave of the swine flu attached to this pandemic, which might occur in the spring / summer months of 2010 (The New York Times News Service). Regarding the safety of the swine flu vaccine, it has been reported recently that there might be a very slight increase in complications such as Guillain-Barré syndrome occurring in individuals vaccinated against swine flu; however, the increase was deemed so small that the CDC was not certain as to whether the risk was real or potentially due to the more stringent monitoring for complications that occurred with the advent of swine flu vaccination program. Studies are continuing by the CDC to access the long-term of safety of the swine flu vaccine (Maugh).

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CARVING A PATH OF SUSTAINABILITY IN HOSTOS COMMUNITY COLLEGE

Flor Henderson, Julie Trachman, Olga Steinberg, Nelson Núñez-Rodríguez, and Yoel Rodríguez

Global warming and climate change are topics that have captured headlines in the last decade. A one week summit to address global climate change took place in Copenhagen, Denmark in December of 2009.[1] The start of the summit was not very hopeful, as many of the participating nations showed fractious behavior, exposing their particular viewpoints and concerns the matter. A disagreement arose around China's rejection of American calls for the CO2 emissions to be independently monitored. In addition, leak of controversial e-mails just before the opening of the summit contributed to complicate matters.[2]

Participating nations believed in limiting CO2 emissions, but they were also worried about the economic impact of such limitation on their countries. For example, what would be the cost of cutting emissions in the economies of wealthy nations and developing countries? Would there be an adequate flow of resources from wealthy countries to less developed countries? What would the economic scene of poor countries be while cutting down their CO2 emissions?1 Though these and other controversial issues were not adequately resolved, the summit generated enough worldwide attention to put global warming and its effects into perspective. As a result, a summit accord was signed by few nations. Nevertheless, the leadership of the United States, Brazil, South Africa, and India among the signatories infused optimism for other countries to join the accord later on.[3]

Regardless of the outcome of negotiations at the international level, we, the ordinary citizens of the world, are in the middle of this global imbroglio. It is up to us to understand the magnitude of the problem and seek ways to deal with it. Despite a variety of opinions on the cause of global warming, it is clear that environmental changes are related to an increase in carbon dioxide concentrations in the atmosphere, alterations in the biogeochemistry of the global nitrogen cycle, and land use. [4]

As an institution of higher education, Hostos Community College (HCC)has the responsibility of educating the members of our community on current events effecting our lives. HCC is located in one of the most polluted areas of New York

City.[5] The college serves a large number of students that need to be educated about environmental issues. It is our duty to channel students' appreciation of the world as a whole, to have them recognize their role as decision makers, and ponder on the consequences of their judgment in the near future.

Despite the fact that scientific evidence on the role of humanity in global warming is still under debate, the changes we will face, whether catastrophic or negligible, are unavoidable. Global warming and climate change have triggered environmental change, they are revolutionizing socio-economic structures worldwide, and are creating new professional fields.[6] In the view of this global phenomenon the Natural Sciences Department had taken the initial steps by using two departmental events, the Hostos Earth Day and the Natural Sciences department's Open House event, as springboards to foster climate change awareness, doing so as early as April of 2006 at the Hostos Earth Day Celebration.[7] In addition, during the spring 2007, a selected group of students was prepared by faculty for their participation in the international forum on global warming organized by ATHGO (Alliance Towards Harnessing Global Opportunities) at the United Nations on June 9th.[8]

Furthermore, the Natural Sciences Department is member of two nation-wide movements dedicated to fostering climate change awareness, Focus The Nation (FTN) and the National Teach-In.[9] Through these affiliations, the department has sponsored a variety of activities, panel discussions, movie showings, conferences, and teach-ins to reach out to the college community. The launching of FTN was in the fall of 2006, with a panel discussion between faculty representatives from each department and institutional leaders. The panelists evaluated global warming from their personal perspectives, expressed their points of view, and provided ideas on how our institution should approach the challenge.

During the following spring semesters (2008 and 2009), teach-in events recruited faculty from several departments, in addition to the entire Natural Sciences department, to participate in the nation-wide movement dedicated to focus the nation's attention to the matter of global warming. Participating faculty dedicated part of their teaching sections or entire sections to discuss global warming, climate change, and sustainability with students, there were also student presentations, slide shows, paintings, poems, and other types of work with practical application, such as energy saving projects.[10] Eventually, institutional leaders and community leaders become involved by participating in panel discussions or giving presentations at college wide events.[11,12]

The efforts were not restricted to academics. Some of our efforts were dedicated to exploring clean energy alternatives such as recycling, green roofs and solar panels.[13,14] Coincidentally, in the spring of 2008, the path initiated at Hostos Community College merged with the Hostos Sustainability Council, which was created by CUNY in order to achieve the Chancellor's goal of a 30% reduction in greenhouse gas emissions and sustainability by the year 2017.[15] As a result, each of the 23 CUNY institutions was asked to create a measurable 10 year sustainability plan at all levels, energy, water, transportation, procurement, and education.[16]

The relevance of the theme of sustainability cannot be overlooked. In view of the positive response and the support we have received college-wide,[17] we hope to count on more faculty members campus-wide to help us in this campaign that is no longer just a campaign of the Natural Sciences' Department, but a CUNY wide crusade. The next step is to continue developing activities related to global warming, climate change, and sustainability in our courses to begin developing multidisciplinary collaborations that will contribute to establish an institutional culture of sustainability.

The year 2017 is the deadline for all CUNY campuses to demonstrate their achievements in all areas. Faculty's goal as part of the Educational Outreach pillar of the Sustainability Council is to create courses that deal directly with global warming, climate change, green energy, green jobs, and sustainable use of natural resources, green engineering, and others focused in shaping student's academic formation according to the realities of the current and future world. The challenge of carving our institution path to sustainability is in our hands.

ENDNOTES

1 New York Times Series (Dec. 7-17th, 2009) <http:??query.nytimes.com/search/?query=copenhagen%20climate%20change.> (Retrieved December 23, 2009)

2 Tierney J. "E-Mail Fracas Shows Peril of Trying to Spin Science." New York Times. Dec. 2009: D1. <http://www.nytimes.com/2009/12/01/science/01tier.html> (Retrieved December 28, 2009)

3 Revkin AC, Broder JM. "A Grudging Accord in Climate Talks." New York Times. 19 Dec. 2009:A1. <http://www.nytimes.com/2009/12/20/science/earth/20accord.html.> (Retrieved December 28, 2009)

4 Peter M. Vitousek (1994) Beyond Global Warming: Ecology and Global Change.Ecology: Vol. 75, No. 7, pp. 1861-1876.

5 The Little College That Could. The Higher Education Digest http://www.internetviz-newsletters.com/datatel/e_article000367552> (Retrieved April 23, 2010)

6 Senate Passes Green Jobs/Green NY Bill (September 11th, 2009) http://www.nysenate.gov/blogs/2009/sep/11/senate-passes-green-jobsgreen -ny-bill (Retrieved April 23, 2010)

7 Earth Day Celebration at Hostos Community College is an event that was initiated in 1995 by Prof. Amanda Bernal-Carlo. The Natural Sciences Department Open House was initiated in 2007 as a showcase of faculty and student work. Full time faculty, adjunct faculty and staff are active participants in both initiatives. The two events have provided the scenario to promote the theme of global warming.

8 Six students, B. Chee, B. Del Rosario, A. Martinez-Hiraldo, E. Modesto, L. Santana, A. Zelalem participated in the International Forum on Global Warming at the United Nations; the event was organized by Alliance Towards Harnessing Global Opportunities (ATHGO). During six weeks, faculty in the Natural Sciences Department provided a boot camp style preparation on the causes of global warming, world geography, the fundamentals of public speaking and essay writing.

9 Hostos Community College is member of both Focus the Nation and the National Teach-In. Two nation-wide movements in Global Warming Awareness. <http://www.focusthenation.org >; < http://www.nationalteachin.org.> (Retrieved December 23, 2009)

10 Several non-science faculty members have also contributed to our events: L. Altman, M. Bencivenni, C. Bernardini, D. Byas, H. Canate, W. Casari, G. Cicco, R. Cohen, B. Czarnocha, S. Dicker, E. Dincer, P. Frenz-Belkin D. Frick, C. Grindley, S. Figueroa, M. Figueroa-Sanchez, H. Lesnick, K. Lundberg, M. Miranda, A. Morales, M. Sharma,

C. Sanabria, J. Preciado, M. Rabry, A. Ramson, A. Trinidad, C. O'Reilly, I. Scott, A. Vaninsky, L. Watkins-Goffman, and E. Zucker.

11 Guest speakers: D. Fernandez (former college president and member of the Focus The Nation Committee); D. Cocco De Filippis (former Provost); Dean C. Molina, D. McFarlane, College Safety Officer; K. Shackford, Director for Energy and the Environment – BOEDC; R. Colavito Royal Blue Waste Services; G. Nison, NYC Department of Sanitation; P. Lay-Dorsey, artist and photographer from Detroit gave permission to print her poems for public display. (A Year of Poems--2003) http://www.windchimewalker.com/-webpages/2003-poems.html (Retrieved April 23, 2010)

12 Community participation at Earth Day and Open House activities regarding global climate change: S. Cruz, New York Power Authority; H. Barnhart, Innovations Coordinator for Environmental Protection Agency Region 2; Y. Yusino, The Green Apple; D. Buckner, President, Solar Energy Systems, LLC; R. Karas, South Bronx Overall Economic Development Corp.; R. Miller (NASA GISS Scientist); J. Quigley, formerly of Bronx Community College - CUNY; M. Pinedo-Vasquez, Center for Environmental Research and Conservation, Columbia University CERC; N. Haque, New York City College of Technology – CUNY.

13 Paper recycling was promoted in the Natural Sciences Department and on campus as a practical approach to help reduce waste. The initiative was coordinated with G. Nison, representative of the NYC Department of Sanitation, and J. Globerman, Building & Grounds Maintenance representative.

14 The potential of installing solar panels on campus was explored with the help of D.Buckner, President, Solar Energy Systems and S. Delgado, F. Virone, Y. Globerman, institutional Building & Grounds representatives. The possibility of installing a green roof on campus was discussed with S. Delgado.

15 Mayor Bloomberg and University officials announce four new universities joining PlaNYC challenge to reach ambitious goal of reducing carbon dioxide emissions 30 percent in 10 years (October 23, 2008) me=http%3a%2f%2fwww.nyc.gov%2fhtml%2fom%2fhtml%2f2008b%2fpr419-08.html&cc=unused1978&rc= 1194&ndi=1(Retrieved April 23, 2010)

16 The CUNY Sustainability Project was given institutional clarity and impetus through the acceptance by Chancellor Goldstein of Mayor Bloomberg's '30 in10' Challenge. This challenge will motivate New York City's public and private universities to reduce their greenhouse gas emissions 30% by 2017. <http://web.cuny.edu/about/sustainable/task-force.html > (Retrieved December 26, 2009)

17 Faculty members from other departments have been integrating the theme of climate change as a discussion topic in their courses. The three National Teach-In activities have included the participation of fifty-three faculty members (thirty of which did not belong to the Natural Sciences department). We have not kept records of the number of students that have attended class presentations during the three teach-in activities, but we can estimate the number can reach around one thousand (53 classes x 20 students) In addition, around five hundred college members watched the documentary "An Inconvenient Truth" during 4 shows/day during 4 weeks in the fall of 2007.

A BUSINESS APPROACH TO TEACHING QUADRATIC FUNCTIONS

Alexander Vaninsky

Teaching mathematics in a high school and in a community college in the New York City, I have noticed that students grasp mathematical concepts more quickly and understand them better when a connection between the concept and the world of business is established. Students were visibly more interested and involved when business applications were presented first, laying the groundwork for technological applications and for the introduction of further theoretical concepts. This observation, well known to mathematics instructors, deserves further research.

This paper aims to show how the business approach can be used in teaching quadratic functions and parabolas: a topic encountered at every level of mathematics and one with a wide range of applications. It will be shown how business information may be presented in a classroom to improve students' understanding of the topic. The paper assumes that students have had some practice in quadratic functions and graphing parabolas.

MOTIVATION: LINEAR AND QUADRATIC FUNCTIONS IN BUSINESS

Before undertaking quadratic functions, students study linear equations and functions, and as part of that process, learn to graph a line. Before introduction of a business model of the quadratic function, students should confirm they have grasped the following: the total cost of any given number of goods is a sum of a variable cost proportional to the amount purchased and of a fixed cost, independent from the amount purchased. Examples of the fixed costs are payments for packing, delivery, or postage. Buying pizza, concert tickets, or flowers, paying the electric or telephone bills are examples that depict a linear model represented by a linear function and a line graph. The first question I usually ask my students is this one: "How and where do quadratic, rather than linear functions, appear in the business world?" One of the possible answers is buying items on a sale.

CASE STUDY: MANAGING A SALE

The holiday season signals a dynamic period during which consumers buy presents, and stores try to move as much of their inventory as possible. To accomplish this, a store typically announces a sale, which is in essence, a call out for customers to buy goods at lower prices. Often, in the hopes of outselling the competition, retailers modify the discounts further, in the hope that customers will purchase more items. Investigation of a case study presented below leads us to a mathematical model using the quadratic function.

A store announces a sale with the following conditions: The buyer must purchase a sales coupon that costs \$9. However, he receives \$1 as cash back when purchasing a single item, \$2 cash back for each item when purchasing two, \$3 off on each item when purchasing three and so on. This means that the bonus per item is proportional to the number of item purchased. For simplicity, it is assumed that the listed price of every item is \$8 – a simplification that allows us to better investigate the case study.

The sale conditions mean that the customer pays \$8 - 1 = \$7 when buying one item. Since the coupon costs \$9, the total adds up to \$7 + \$9 = \$16 for the first item. After buying two items, the customer pays 2·(\$8 - \$1·2) = \$12 as well as the cost of the coupon. Thus, two items total is \$12 + \$9 = \$21, and the cost per item is now \$21/2 = \$10.5. This is still more than \$16 for two single items without the sales coupon - an enticing incentive to buy more (recall that customers need a lot of presents for the holidays). Students are asked to calculate further and note that the cost per item drops as the number of purchased items increases.

This scenario paves the way for a discussion of the driving forces of sale pricing and on the occurrence of quadratic functions in business. In the course of the discussion, a question may arise: why would a customer be interested in purchasing several or more goods in the same store? One explanation would be that they usually want to spend as little time on shopping for presents as will allow, because of the sheer number of items needed. It is advantageous to buy all of the presents in the same location. An added bonus is that the reward per item increases proportionately with the number of items bought.

Let's now consider the store management's position. What might be some of their goals and what conditions should be in place to properly meet them? Once again, to simplify the real world, we decide that the store has an unlimited supply of goods, which will depreciate post-holidays, such as Halloween costumes, Christmas trees, New Year's greeting cards etc. We can assume that one of store management objectives is to sell the most goods possible to each and every customer. The scenario that is shaping up can be likened to a game with two types of players: buyers who wish to buy more while minimizing their spending per item, and store management, which wants to attract more buyers while maximizing revenue per buyer.

In order to depict how the different objectives shape the game, some questions can again be brought before the students. Is it possible, given the present conditions, that the cash-back bonus may exceed the total sum of the sales coupon and payment for the purchased goods? If so, how to prevent that?

To help answer these, students are asked to calculate cost per item, total cost (equal to the revenue of the store), and savings for 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 purchased items. By doing so, students fill in Table 1 and a box in Figure 1.

Table 1. Revenue from the sale. Listed price is $8, sales coupon cost, $9.

Items	Total listed cost	Bonus per item	Total bonus	Total cost = Store revenue[1)]	Actual cost of one item	Total savings = Total listed cost - Total cost
1	$8	$1	$1*1 = $1	8*1-1*1 + 9 = $16	$16.00	-$8
2	$16	$2	$2*2 = $4	8*2-2*2+ 9 = $21	$10.50	-$5
3	$24	$ 3	$3*3 = $9	8*3-3*3 + 9 = $24	$8.00	$0
4[2)]	$32	$ 4	$4*4 = $16	8*4-4*4 + 9 = $25	$6.25	$7
5	$40	$ 5	$5*5 = $25	8*5-5*5 + 9 = $24	$4.80	$16
6	$48	$6	$6*6 = $36	8*6-6*6 + 9 = $21	$3.50	$27
7	$56	$7	$7*7 = $49	8*7-7*7 + 9 = $16	$2.29	$40
8	$64	$8	$8*8 = $64	8*8-8*8 + 9 = $9	$1.13	$55
9	$72	$9	$9*9 = $81	8*9-9*9 + 9 = $0	$0.00	$72
10	$80	$10	$10*10 = $100	8*10-10*10+9 = -$11	-$1.10	$91
x	$\$8 \cdot x$	$\$1 \cdot x$	$(1x)x = x^2$	$y = 8x - x^2 + 9$	y/x	$8x-(9 + 8x - x^2) = (x^2 - 9)$

Notes:

1) Total cost equals to total listed price minus total bonus plus sales coupon cost.

2) Maximum allowable number of items. Store revenue is maximal; customers save money.

DISCUSSION OF THE RESULTS

As Table 1 shows, a customer buying nine items just gets the cost of coupon back, while buying ten he stands to gain from the purchase. It becomes clear that the store management should restrict the purchase of more than eight items per customer. Yet in that case, the store receives a measly $9 of revenue per customer. Can it do better? From Table 1, it follows that the maximum revenue of $25 per customer is generated when he purchases four items, and sensibly, the customer should be limited to this as the maximum amount of purchasable goods.

Holiday Sale.
Spend more! Save more!
It's the easiest way to shop. No complicated equations.
Just the best saving opportunity.

Buy one and get $1 bonus.
Buy two and get $2 bonus for each.
Buy three and get $3 bonus for each.
Buy four and get $4 bonus for each.

Your total savings with buying four are

$

Price of each item is $8.
Coupon price is $9.
Coupon is valid for purchase up to 4 items.

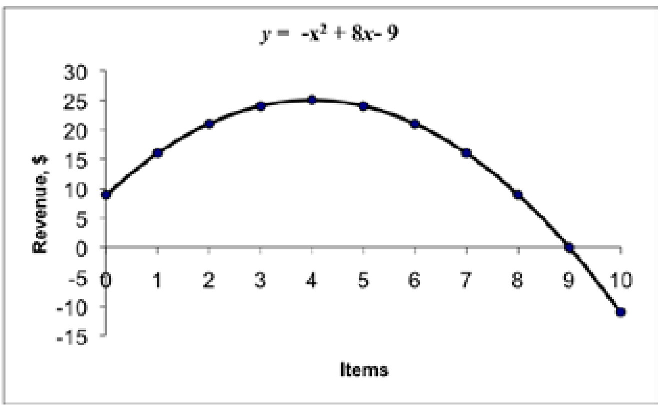
Fig. 1. Sales coupon.

A header and content are compiled based on real sales coupons.

Students are asked to fill in the total savings box using data of Table 1.

This point would be an opportune time to segue way into a two-part discussion. The first part deals with gains and losses that shape the store's pricing policy. The second part addresses the derivation of a mathematical model, which would lead students to the quadratic function. Let's recall that, with a four item purchase, the customer pays \$6.25 per item, or \$62.5/\$80 = 78.125% of the listed price only. The utility of the sales coupon may also be addressed: it compels the customers to acquire four items to avoid paying for nothing. Students are encouraged to brainstorm similar offers aimed at increasing the amount purchased, such as free parking with purchase, a participation in a lottery, gifts available with purchase above a predefined sum etc.

MATHEMATICAL MODEL OF THE SALE



The previous discussion prepares the students to come up with a mathematical model. Assume that x items are purchased (following the last row of Table 1). The total listed cost is 8x dollars, with the bonus per item being 1x dollars. The price of one item with the bonus is (8 - 1x) dollars, and the total amount, including the sales coupon cost, is (8 - 1x)·x + 9 dollars. Recall that the bonus increases proportionally with the number of items purchased, so that total bonus with x items purchased is (1x)·x = 1x2.

Students were asked to write a formula of the relationship between total revenue from a single customer (y) and the number of items that have been purchased (x) and to draw a graph. Table 1 shows that the formula is y = -1x2+8x+9, and the graph is a parabola shown in Figure 2. Students were asked also to suggest different conditions of a sale and to develop Table 1 and Figures 1 and 2 correspondingly. The author noticed a positive impact on students' perceptions of the topic while performing this activity.

TEACHING REMEDIAL MATHEMATICS FOR CONCEPTUAL UNDERSTANDING: STUDENT RESPONSE

Alice Cunningham

INTRODUCTION

This paper describes student responses to a voluntary anonymous questionnaire administered at the end of the fall 2009 semester by the author to her students in Hostos' Elementary Algebra course (Math 020). The questionnaire was conducted pursuant to a COBI grant awarded in June 2009 to the author and Professor Olen Dias, also of the Hostos Mathematics Department, for Teaching Remedial Mathematics Through Sense-Making Strategies. Hostos' Institutional Review Board granted its approval for the publication of this article.

At Hostos, Elementary Algebra is aimed at preparing for the second level of the COMPASS, a City University of New York exit examination necessary to graduation and college-level mathematics courses. The author's approach is to teach for understanding by showing the sense behind the rules, with the goal of promoting long-term concept retention rather than short-term rule memorization. As can be seen from the questionnaire (a copy of which is attached), the approach is largely pictorial. The questionnaire explored the students' response to this approach. Student responses are quoted verbatim, without adjustments for grammar, punctuation, and spelling.

ANALYSIS OF RESULTS

The questionnaire addressed four of the multiple topics covered in the course in the order in which those topics were taught: operations with signed numbers (numbers with positive or negative signs); the rules of exponents; scientific notation; and finding the greatest common factor of a list of exponents raised to powers. Of the 30 active students (those still enrolled after the date to withdraw without penalty), 19 (or close to two-thirds of those students) responded to the questionnaire. A description of the results follows.

OPERATIONS WITH SIGNED NUMBERS

All 19 respondents answered this question. One student replied, without elaboration, that he hadn't found the method helpful. Two others responded that the strategy wasn't new to them, although one of these added that "It was simple this way." The remaining responses were entirely favorable. Many emphasized the value of a diagrammatic approach for determining whether the result of an operation with signed numbers should fall on the positive or negative side of the number line (to the right or left of zero). As one student remarked, "it is helpful because it makes it easier to count and understand it better in an illustrated diagram like the number line." Another stated, "I found it helpful because a picture will show you how much places you move either positive or negative." Similar responses include: "it's easier to understand with graphs"; "the graph basically shows you how many spaces in between"; and "the explanation is a clear image." Other responses found it helpful to have operations with signed numbers broken down piece-meal. One student indicated that "I found it helpful because everything is broken down step by step in the explanation," while another said "it explain step by step how to found the larger size and the smaller one."

OPERATIONS WITH EXPONENTS

Of the 19 respondents, 18 answered the question regarding exponents. Of these, one expressed a preference for a hard and fast rule: for multiplying variables, add the exponents; for dividing variables, subtract the exponents. The remaining 17 responses suggested that trying to work out the result by using variables raised to small powers assisted comprehension. Sample responses include: "It gives us a way to see why we have certain results"; this approach "makes the rule self-explanatory"; "you see everything"; "the method show me the step to follow"; and "it helps you not miss a power."

SCIENTIFIC NOTATION

The answers to this question necessitate a recitation of the question. As can be seen from the attached questionnaire, it reads:

Scientific Notation: For determining how to move the decimal point in converting back and forth between Scientific and Standard Notation and whether to use a positive or negative exponent, instead of memorizing rules, we tried to focus on whether the conversion was making the number look bigger or smaller than it actually is. For example, in converting the number 8403 from Standard to Scientific Notation, we would write the number as , because the number is actually larger by three powers of ten than the way it is shown in Scientific Notation. Similarly, if we were converting the number from Scientific to Standard Notation, we would write .008403, because the number is actually smaller by three powers of ten than the way it appears in Scientific Notation. Do you find this type of explanation helpful? Why or why not?

In teaching this topic, I complemented the verbal explanation described above with a pictorial description illustrating movement of the decimal point by the number of powers of ten indicated by the exponent. Nevertheless, the same individual who expressed a preference for a hard and fast rule in the case of operations with exponents expressed the same preference here. In his words (alluding to a conversion from Scientific to Standard Notation but inverting the rule), "some students will understand it much better if it is said, when it is , then the decimal point has to be moved from right to left, and when it's then the decimal point will be moved from left to right." Two additional students, who were enthusiastic about the pictorial methods used for the other three topics, disliked the strategy used for Scientific Notation. One student felt that the approach involved "too much explaining," while the other said, "I am a visual person. I would have to see it broken down."

The remaining respondents favored the approach. A number of students found that the strategy assisted their understanding of decimals. In their words, "it helped me understand decimals, which I disliked"; "the exponents explain how many times the decimal has to be moved"; and "It helps me find if I'm supposed to move negative or positive." One student stated that the approach "Explains by steps how to get the result." Others described the strategy as "a simple explanation that can not be mistaken"; "useful and simple"; and "very easy to remember." Thus, although the sole non-pictorial method described in the questionnaire drew the most unfavorable responses, on balance, the comments were favorable (15/18, or approximately 83%).

GREATEST COMMON FACTOR OF A LIST OF EXPONENTS

As for the strategy shown for finding the greatest common factor of a list of exponents raised to powers, 18 of the 19 respondents answered this question, all favorably. One student found the strategy helpful "because it was broken down visually, which is the best way to explain any type of math." Other comments include: "You see a picture of what you need in your head and like this no mistake is made"; "when you write it out like that you know exactly which is the GCF"; and "I understand that factors are the most numbers or variables that you can take out from all the groups. The detailed explanation helped me a lot." Additional responses include: "it explains how many variables there are"; "the explanation shows how easy it is"; and "I have always gotten confuse with the GCF, this is excellent." One student commented, "By using this rule the students will learn more easy and less stressful. During the semester this was my favorite topic learned."

SUMMARY AND CONCLUSION

In the case of two of the four questionnaire topics (operations with exponents and Scientific Notation), one student expressed a preference for rules rather than sense-making explanations. Scientific Notation, the sole topic on the questionnaire not explained largely pictorially, drew the most criticism. By and large, however, student responses emphasized the benefit of explaining the derivation of the rules. To quote one student, "The professor didn't just give the problems and solved them, she explained the rules and broke it down for us to understand better." Thus, as to those students who remained in the course and who were willing to take the questionnaire, their responses suggest that teaching remedial mathematics for conceptual understanding in this demanding course by showing the sense behind the rules facilitated both comprehension and appreciation for the subject. The implications of these results are that teaching for sense-making through a combination of pictorial and verbal explanations facilitates both conceptual understanding and subject matter enjoyment.

CONFESSIONS OF A WAC (WRITING ACROSS THE CURRICULUM) GROUPIE

Sandy Figueroa

Where do I begin to tell the story of my love affair with WAC? The bug hit me ages ago when I was a shorthand/transcription teacher. How exciting to teach the mechanics of grammar and punctuation while teaching the arcane language of Gregg symbolic shorthand. Professional Business Education conferences dealing with the subject of shorthand abounded in tips and techniques for teaching punctuation, sentence structure, and grammar to the would-be stenographer/secretary.

Fast forward years later when Gregg/Pitman symbolic shorthand "bit the dust" and left all shorthand/transcription teachers lamenting: Where are the students going to learn grammar, sentence structure, and punctuation? Everyone knows that shorthand is THE only place to learn the secrets of mechanical writing." That thinking always left me wondering, did the English departments go out of business when we shorthand/transcription teachers were drumming the mechanics into the ears and fingers of our students? Now with the demise of symbolic shorthand, whence cometh our help? Well, when CUNY embarked on WAC, a mere century ago, I began to attend the meetings or workshops at Hostos. A small cadre of faculty came together at Hostos to discover the importance of WAC and to experience the writing transformation of our students. Those of us brave enough to venture into the foray of creating a Writing Intensive course were armed with a writing fellow, a stipend, and support groups via workshops and CUNY conferences. There I stood in fear and trembling—the shorthand/transcription teacher who had taught the mechanics of writing and a teacher of Business English—all mechanical writing, of course. Definitely, not a Hemingway, Morrison, O'Neill, or Steinbeck. I could write clear and concise sentences and write essays that had an introduction, a body, and a conclusion, and I could teach my students to do the same. Easy, yes? So, why was I so afraid, and why did I take two years with two writing fellows to create my first WI course?

Simple. Shorthand/transcription teachers no longer had the market on writing mechanics. Now, we had to view our work in light of all the research. In addition, many of us had to flee to other courses in the Business Education arena because symbolic shorthand had gone the way of all flesh like Latin—another course that developed "expert" writers. So, here we are with all of the other non-English disciplines attempting to incorporate writing in our syllabi and encouraging our students to enjoy the tedious task of revising. Our workshop gurus made the revision process look so easy and seem so much fun. I had a great time in the workshops but ask me how enjoyable the experience was for my students and we get another response. But, I am getting ahead of myself. Back to the point—fear and trembling.

For two years, I agonized over my courses. What do I include? What do my students need? Why is this not coming together? Finally, I had a summer in which I had time to reflect: What did I do in shorthand/transcription that I can work in my computer classes? My perceptive base—what did I know? What did I want to get across? New lesson, and how do I know if my students learned anything? Summary. Once I couched the WAC experience in these terms, I was good to go. Now, you couldn't stop me from talking in the workshops. I was all fired up. I saw the light. Add to the WAC, my new-found conversion to asynchronous online teaching, and you couldn't stop the old Figs. Now, I could combine a WI with my asynchronous online teaching, and I could comfortably work with my students.

I have attended workshops, presented at CUNY WAC and CUNY IT conferences on the value of WAC and asynchronous online teaching. I have worked with excellent writing fellows. My work with WAC has enabled me to move into General Education and see the value of Gen Ed across the curriculum, and I have come to the point where I can bravely ask colleagues to observe my class. So, when I hear a WAC workshop, conference, or CUNY conference, I am one of the first to sign up. When I hear Gen Ed workshop, conference, or CUNY conference, I am one of the first to sign up. I am unabashedly a WAC groupie!!

My experiences are no small feat. How long will this last, you ask, and where will this lead? Only one place—research: How do I know that what I am doing is working, what works, and, of course, why and for whom? Now, I have come to the point of all inquiry and curiosity—let's examine. After all, isn't that the point of research?

DRAMATOPHOBIA TO THEATROPHILIA

Dennis Bates

Forgive my penchant for neologisms and allow me to revel in my virginal thespian experience striding the Hostos Repertory Theatre stage as the ignoble Dr. Fine in "Six Degrees of Separation." From a primal fear of being deluged by floodlights and upstaged by a talent deficit greater than our national debt, I was inspired by the avatar of the ancient muses and magically transformed into a loving and practicing devotee of the 'emoting arts' in rapt admiration for the team players, actors, staff members, etc. whom I rehearsed and performed with.

The catalysts of this metamorphosis were the Director, E. Randahl Hoey, the Executive Producer, Angel Morales, the Stage Manager, Bill Sorice, Marisol Carrere, who was marvelous playing Ouisa, and all of my fellow actors and stage personnel whose camaraderie and egalitarian persona elicited our very best theatrical performances. Last, but not least, were the audiences who elevated these performances to an epiphany - an enlightening revelation of the very soul of our shared humanity were reincarnated not only in the resurrection of each and every scene and vignette from the playwright's pages onto the stage but also from the perspective of the audience and its interpretation and appreciation of each and every character's nuances and psychology.

This transmogrification occurred anew with each new audience - from the genesis of my first performance where I amateurishly flubbed my lines and stepped out of character, a cardinal sin, to evolving revelations of how I should better portray my character, Dr. Fine. I was able to do this only after being given excellent advice and encouragement from my superiors, colleagues, and members of the audience. This character development also developed my own character and helped make me more confident and assured. I learned that not only was my performance enhanced but also those of the entire cast. I began to understand how we all inspire one another to deliver performances that exceed our usual limitations and impel us, together with the audience, to soar beyond the gravitational pull of everyday life.

When actors truly step into their roles and elicit vicarious responses from a captivated audience then they have elevated themselves and their audience to a higher level of understanding of our shared human experiences of triumphs and tragedies.

We all enthusiastically embrace opportunities to gain insight into the human condition and enhance our understanding of ourselves and each other. Exceptional theatrical performances like great art and music can prove to be such opportunities.

Perhaps Shakespeare alludes to this desired self-awareness in his universally acclaimed play "Hamlet" when the protagonist Hamlet stages a play within a play of his deceased father's murder. Hamlet successfully attempts "to catch the conscience of the king" when he reveals the king to himself in all his despotism (2.2. 638-39). We all crave self-revelation of our dreams and desires, although preferably not the drastic self-admission of base evil as that of the king.

Wow, what an enjoyable, exhilarating experience! I learned that if you're true to your own self and you internalize the role you're portraying, then you can't be false when you present yourself in your own inimitable style as the embodiment of that role which the director had originally envisaged. I hope I accomplished some semblance of that.

As an added bonus, a bad word to use in this age of CEOs and their exorbitant golden parachutes, it's very nice to be recognized and complimented by Hostos students and staff whether familiar or unfamiliar - perhaps I did make a favorable impression after all.

Finally, the theatre, Hostos' in particular, proved to be a true self-actualizing experience and a wonderful addiction beyond my imaginings. Perhaps as the immortal Shakespeare evokes from Hamlet to Horatio: "There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy" (1.5. 332-34). That's what great theatre does for us, whether as actors or spectators - it encourages us to interact, think and dream beyond our routine everyday existence here on earth.

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HOSTOS COMMUNITY COLLEGE

TOUCHSTONE

VOLUME 3.1 (SPRING 2010)

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