

*The Journal of
Effective Teaching*

J&T

an online journal devoted to teaching excellence

Volume 11/Issue 1/February 2011

J&T

*The Journal of
Effective Teaching
an online journal devoted to teaching excellence*

*Volume 11/Issue 1/February 2011
Online at <http://www.uncw.edu/cte/et/>*

EDITORIAL BOARD

Editor-in-Chief

Dr. Russell Herman, University of North Carolina Wilmington

Editorial Board

Timothy Ballard, Biology

John Fischetti, Education

Caroline Clements, Psychology

Russell Herman, Mathematics and Physics

Pamela Evers, Business and Law

Mahnaz Moallem, Education

Associate Editor

Caroline Clements, UNCW Center for Teaching Excellence, Psychology

Consultants

Librarians - **Sue Ann Cody**, **Rebecca Kemp**

Computer Consultant - **Shane Baptista**

Reviewers

Sharon Ballard, East Carolina University, NC

Scott Imig, UNC Wilmington, NC

Wanda Boyer, University of Victoria, BC, Canada

Robert Kenny, University of Central Florida, FL

Barbara Chesler Buckner, Coastal Carolina, SC

Dennis Kubasko, UNC Wilmington, NC

Tammala Bulger, UNC Wilmington, NC

Gabriel Lugo, UNC Wilmington, NC

Donald Bushman, UNC Wilmington, NC

Katherine Pang, UT Tyler, TX

Kathleen Cook, Seattle University, WA

Colleen Reilly, UNC Wilmington, NC

Michelle d'Abundo, UNC Wilmington, NC

Gene Tagliarini, UNC Wilmington, NC

Candace Gauthier, UNC Wilmington, NC

Carolyn Vander Shee, Northern Illinois U., IL

Jace Hargis, University of the Pacific, CA

Tamara Walser, UNC Wilmington, NC

Submissions

The Journal of Effective Teaching is published online at <http://www.uncw.edu/cte/et/>. All submissions should be directed electronically to Dr. Russell Herman, Editor-in-Chief, at jet@uncw.edu. The address for other correspondence is

The Journal of Effective Teaching
c/o Center for Teaching Excellence
University of North Carolina Wilmington
601 S. College Road
Wilmington, NC 28403 USA
FAX 910-962-3427

(ISSN 1935-7869 for limited print issues and ISSN 1935-7850 for the online issues)

CONTENTS

Letter from the Editor-in-Chief: What Makes an Excellent Professor? <i>Russell L. Herman</i>	1-5
Scholarship of Teaching	
An Exploration of the Value of Service-Learning: Characteristics of Traditional and Honor Service-Learners <i>Lori Simons, Elizabeth Williams, and Brittany Russell</i>	6-18
Statistical Analysis of Cooperative Strategy Compared with Individualistic Strategy: An Application Study <i>Tawfik A. Saleh</i>	19-27
Effective Teaching	
Using <i>Monopoly</i> to Introduce Concepts of Race and Ethnic Relations <i>Warren Waren</i>	28-35
Interdisciplinary Team Teaching: An Effective Method to Transform Student Attitudes <i>Amanda Little and Anne Hoel</i>	36-44
Student Engagement and Teacher Practices: Using Hillary Clinton's Presidential Campaign for Learning Purposes <i>Sibylle Gruber</i>	45-61
The Use of a Checklist and Qualitative Notebooks for an Interactive Process of Teaching and Learning Qualitative Research <i>Rebecca K. Frels, Bipin Sharma, Anthony J. Onwuegbuzie, Nancy L. Leech, and Marcella D. Stark</i>	62-79
Cheating In Online Courses: The Student Definition <i>Deborah A. Raines, Peter Ricci, Susan L. Brown, Terry Eggenberger, Tobin Hindle, and Mara Schiff</i>	80-89

CALL FOR PAPERS

The Journal of Effective Teaching is accepting submissions for review for the Fall 2011 issue. Manuscripts will be due May 31, 2011. The expected publication date will be September 30th. Articles will be accepted in any of the Content Areas supported by the journal.

INFORMATION FOR AUTHORS

The Journal of Effective Teaching is an electronic journal devoted to the exchange of ideas and information about undergraduate and graduate teaching. Articles are solicited for publications which address excellence in teaching at colleges and universities. We invite contributors to share their insights in pedagogy, innovations in teaching and learning, and classroom experiences in the form of a scholarly communication which will be reviewed by experts in teaching scholarship. Articles should appeal to a broad campus readership. Articles which draw upon specific-discipline based research or teaching practices should elaborate on how the teaching practice, research or findings relates across the disciplines. We are particularly interested in topics addressed in the particular Content Areas described at this site, including empirical research on pedagogy, innovations in teaching and learning, and classroom experiences.

The Journal of Effective Teaching will be published online twice a year at the web site <http://www.uncw.edu/cte/ET/>. All manuscripts for publication should be submitted electronically to the Editor-in-Chief, Dr. Russell Herman, at jet@uncw.edu. Articles will be reviewed by two to three referees.

Manuscripts for publication should:

- Follow APA guidelines (5th Edition).
- Include an abstract and 3-5 keywords.
- Typeset in English using MS Word format and 12 pt Times New Roman
- Articles/essays on effective teaching should be 2000-5000.
- Research articles should be 3000-8000 words.
- Tables and figures should be placed appropriately in the text.

All articles published in The Journal of Effective Teaching will be copyrighted under the Creative Commons "Attribution-Non Commercial-No Derivs" license. The Journal of Effective Teaching will require that the author sign a copyright agreement prior to publication.

Deadlines for Upcoming Issues		
	Fall 2011	Spring 2012
Submissions Due	May 31, 2011	October 31, 2011
Notification of Acceptance	July 31, 2011	December 31, 2011
Final Manuscripts Due	August 31, 2011	January 31, 2012

Letter from the Editor-in-Chief: What Makes an Excellent Professor?

Russell L. Herman¹

The University of North Carolina Wilmington, Wilmington, NC

The best professors treat students like people, not numbers; they go beyond their call of duty in terms of helping students and holding office hours; they not only know their material, but they also know how to teach it well. They understand the student and concerns the class may have. ... a great professor must also be defined in terms of quality of research done, involvement in the campus community, quality of teaching, and other important criteria.²

Readers of *The Journal of Effective Teaching* are most likely those who are continually looking for what they can use to improve their teaching. Our authors are those who have explored a variety of methods in some depth. The papers in these volumes typically address specific methods, like cooperative learning, team teaching, and experiential learning, or student behaviors and learning styles. However, papers in *The Journal of Effective Teaching* do not generally explore the qualities and behavior of an excellent teacher. So, I now ask, “What makes an effective professor in the classroom?”

We all constantly struggle to improve our teaching. Many of us are introverts and feared our first teaching experiences as graduate teaching assistants or beginning professors. Good teachers struggle with this question throughout their career. How do I excite the students about the subject matter? How do I reach a diverse group of students? How do I convey my excitement and get them to want to learn (my specialty)? How do I maintain high expectations but show flexibility so I do not blame students for what they do not know coming into my class? What will they take to the next class in our program? What will they remember for a lifetime? And then there is a more controversial question – How do I pay attention to but not worry about student evaluations?

Answers to these and other questions might be found by discussing teaching practices with other faculty both within and outside the discipline, such as going to university teaching centers. Talking with faculty across disciplines can lead to surprising commonalities or new insights and techniques. Reading journals like *The Journal of Effective Teaching* can introduce new techniques or convey their successes. You can seek and read essays on teaching excellence by award winning professors at your campus. Examples of

¹ Author's email: hermanr@uncw.edu

² D. Walcerz. (1996). Newsspeak, Worcester Polytechnic Institute. Retrieved from <http://www.wpi.edu/News/TechNews/960326/Editorial.html>

such essays are in a UNCW publication, *Best Practices in University Teaching*³. Other essays are posted online, highlighting some of the values that an excellent teacher should possess. Probably the best source of answers as to what makes an excellent professor would be to ask both faculty and students, say via a Facebook posting.

Reading many of these essays and talking to students, it is easy to see that several common themes emerge. In some ways, these attributes are covered by Dr. Walcerz's quote at the beginning of this letter. The key phrases in his quote are: *go beyond their call of duty; know the material; know how to teach it well; and, understand the student*. Below is a grouping of the many characteristics that I have found and grouped within these categories, though some bullets can easily be placed in more than one category.

Go Beyond the Call of Duty

- Accessible, holding both real and virtual office hours, meet with groups.
- Fair and open/predictable, expressing and applying expectations the same to all.
- Prompt to class and in returning graded materials.
- Resourceful, providing or finding learning opportunities.

Know the Material

- Passionate for the subject, teaching, and learning.
- Prepared, knowing the material and how to communicate it.
- Informed, being able to convey both new and old materials and methods.
- Confident, not afraid to make mistakes and willing to admit to ignorances.

Teach the Material Well

- Enthusiastic and engaging
- Interactive
- Clear - Excellent Communicator
- Encourage questions
- Organized
- Challenging and Motivating, having high expectations towards attainable goals
- Innovative
- Technology literate, able to use technology effectively

Understand the Student

- Caring - genuinely care about students at all levels
 - learn names, attend club meetings, meet outside of class,

³ Best Practices in University Teaching, Essays by Award-Winning Faculty at the University of North Carolina Wilmington. (2006). Ed. Carolina Clements, The Publishing Laboratory of UNC Wilmington
<http://www.blairpub.com/alltitles/bestpractices.htm>

- Take an interest in the students. Understand the changing generations.
- Listen to students, Respect students
- Advise and Mentor – making a personal connection with students, rapport
- Approachable, Humorous, Hygenic, Patient
- Encourage students to own lifelong learning.

So, how does one embrace these characteristics in practice? Let's explore a few practices in some detail. You might know all of this already, but when was the last time you thought about the components of teaching?

First of all, you should aim to make a good first impression the first day. Express your expectations early in your syllabus. Provide contact information, a list of required materials, a discussion of course coverage and philosophy, policies on attendance (even if there are none) and testing information. Also, in these days of assessment, it is common practice to provide a small set of learning objectives. You can post more specific guidelines for papers, course supplements, etc., online. These may include other useful links to policies on your honor code and university services.

Establish attainable goals. Be challenging, but within the students' grasp, helping them along at points that turn out to be slightly more challenging than usual. At the same time you need to realize that students bring the experiences of their generation. As we progress in our profession, we often forget what it was like to be an undergraduate and that the current generation is different from ours. Keep this in mind and allow your goals and teaching style to adapt to the ever changing demographics of the student population.

We typically see students in class the equivalent of one work week, or about 35 hours, in a given semester for a three semester hour class. (That is 50 minutes, forty-two times per semester. You can add a dozen hours for each additional credit.) If one teaches a TR class, that is about 30 meetings vs. the over 40 meetings for a MWF class. The more students see you, the more you become part of their lives. But, you should also aim to reach out and touch them outside the classroom. Keep in touch with the students by holding office hours (and sticking to those hours), posting and answering emails, and providing other opportunities for interaction outside of class such as study sessions and campus events. In an online environment we might even have more opportunity to connect with individual students than in a large lecture class.

Show passion for both teaching and your discipline. This is the most common mentioned quality of an excellent teacher. Students need to see that you care about their learning and they appreciate it when you can demonstrate your love of what you are teaching. Do you get tired of teaching the same courses over and over? Students pick up on this, as your passion may seem to wane and it appears that you do not want to teach but prefer to be doing research or something else. By teaching new courses, using slightly different teaching methods, or bringing your research into the classroom, you can reinvigorate or maintain the passion you had when you first started teaching.

You should establish common ground early in the semester and reinforce it with periodic review. Begin each class with short summary of what was previously discussed and paint a picture of where the discussion may be going either in the present lecture or within the scope of the section, chapter, or course. Solicit student responses as a way to see where the students are and use these responses to guide the students. Understand where their knowledge and behavior needs work, or how you need to tweak your class in order to bring your students along in the discussion. You might even need to be purposely repetitive in order to make the connection. This approach can make the course more dynamic, evolving, and interesting. Finding common ground can also help in opening the doors to education in the form of both attaining knowledge and developing critical thought.

Know the material. This should be the easiest quality. You have gotten the appropriate degrees. Your credentials have been evaluated by your department and institution. So, what more is there? Knowing the subject and conveying what you know clearly, logically, in fifty minutes is not easy at first. Taking courses in graduate school is not the same as teaching them. You gain new depths of understanding every time you teach. Also, you need to keep up with fields that are changing, new literature, etc. You should be familiar with the your texts and other materials.

Part of knowing the material is being prepared. No matter how much you think you know about the subject, there is still preparation that should take place. Not only should you know the intricacies of your facts, but also the arguments, the operation of the classroom equipment and technology, and have backup plans in case of the inevitable. Most importantly, have you thought about the best way to get students to learn or what your goals are for that class? Of course, part of being prepared is to plan to be on time. Students do not look favorably on professors who are continually late. Being on time, returning graded material in a timely manner, are behaviors that earn their respect and are just further evidence that you are concerned about them.

Be a role model. Show by example that you are also a learner. Bring in new and interesting material to the class. Though, you should stay on topic and not digress too far from your goals for each class. Students often do not appreciate going off topic, especially on things that are not on the exam. However, they should understand that some things do not always show up on an exam and are interesting in their own right. Furthermore, such topics may help students develop basic skills. At the very least, you are demonstrating the importance of intellectual curiosity, which helps to develop a passion for learning and developing a keen mind

Know yourself. What is your teaching style? What works best for you? What teaching styles work best for your current class? There are many techniques, such as found in JET. Try a few different ones, though not all at once. Mesh these techniques with your teaching style and those that you are comfortable bringing to the classroom. Learn from your students by probing and listening to them. We are continually learning and it can't hurt to have them see that you are learning from them as well.

Use technology, but be careful to spare the PowerPoint presentations. Students know when professors use canned slides, clicking away, and giving the impression that they had put little preparation into their class. Use email, structured social networking, student response systems, and other technologies for which you and your students are comfortable. Recognize how mobile this generation is and turn it into a tool, knowing when it is and is not appropriate.

Interaction not only engages students, it helps professors to know their students, their backgrounds and their learning styles. It also allows for students to get to understand their professors and gain respect for them. They get to see when the professor is working in an unbiased fashion, not playing to favorites, carrying out fair policies, and showing their concern for the students' success in the university.

At the same time, we should get our students to stop and smell the roses in our disciplines. Have them slow down and dig deep into some aspect of the subjects we try to convey. It is then that they begin to develop the same passions or to understand ours. It is then that they begin on the path to a deeper understanding. One way to do this is by providing additional learning experiences outside the classroom.

Learning experiences outside the classroom can come from independent research, experiential and applied learning. An excellent professor not only educates in the framework of a course, or a classroom, but also mentors students individually and seeks out opportunities to work with students on individual projects, lab work, internships, or theses. Such experiences are not only important avenues to preparing students for post-graduate experiences, but also keeps the professor active and up to date, learning new things which often find their way into other classes. Such experiences often persist in the memories of graduates.

What will my students remember from my classes? Do students leave each class changed to some degree? Do you provide the environment and opportunities that allow for learning to take place? Keeping some of these ideas in mind may help students to carry away what we want them to know well past the courses they take with you.

We must not forget the student – they also have a role in their education. They ultimately are responsible for what they take away from classes, courses, programs, and ultimately their university experience. It is our responsibility to maximize the rewards and to make them feel part of the community long before graduation.

In the end, we should provide opportunities for students to see the world through our disciplines, to share their work with others, to feel that we have high, but realistic, expectations for their success. They need to learn that they own their education, need to practice what they have learned, learn from their mistakes such as generating multiple drafts of papers, learn to give and receive feedback. As a role model, they will see some of the same qualities in you and the importance of developing a lasting intellectual curiosity. The excellent professor accomplishes this and more by showing students that we care about their learning.

An Exploration of the Value of Service-Learning: Characteristics of Traditional and Honor Service-Learners

Lori Simons¹, Elizabeth Williams, and Brittany Russell
Widener University, Chester, PA, 19013

Abstract

This study explored the value of service for undergraduate students enrolled in an Honors and a non-Honors section of a service-learning course. A quasi-experimental study was conducted to identify if students who participated in an Honors ($n = 18$) section of a service-learning course show greater gains in attitudes and skills associated with community engagement over the semester than students who participated in a non-Honors ($n = 28$) course section. The results indicate that students improve their diversity and social justice attitudes, acquire competence and leadership skills, and increase their desire to make a difference through participation in short-term service projects by the end of the term, regardless of whether they were in the Honors or non-Honors course. Community partners also appraised both student groups as self-starters who exercise good judgment in their work with service recipients. The consistency of data from teacher and student reports suggests that service-learning is a useful pedagogical strategy for teaching students in both Honors and non-Honors courses.

Keywords: Service-learning, honors and non-honors courses, student perceptions of service.

Institutions of higher education (IHE) have implemented service-learning courses in liberal arts curricula as a way to help students learn the course concepts, understand the conditions that lead to racial and economic disparities in the community, and become responsible citizens (Eyler & Giles, 1999; Sperling, 2007). Service-learning is a pedagogical approach that requires students to connect the course content to the service context through reflection and discussion (Eyler & Giles, 1999). Educators not only view service-learning as an effective method to teach about the complexities of race and culture, but they also perceive it as a strategy that promotes academic and civic engagement (Conley & Hamlin, 2009; Yeh, 2010). The present study investigates the extent to which students acquire attitudes, skills, and preferences for community engagement through participation in an Honors and a non-Honors section of a service-learning course.

¹ Corresponding author's email: Lorgold@aol.com

Service-Learning Research

Investigations on service-learning have noted improvements in social justice attitudes and community engagement among undergraduate students (Eyler & Giles, 1999). Conley and Hamlin (2009) conducted a case analysis on reflections from five students enrolled in a semester-long, first-year seminar at an inner-city college. These researchers found that all five participants changed their thoughts about power, privilege, and difference and gained an understanding of the conditions that lead to inequities in society, but only one participant noted a desire to pursue a career involving service. Yeh (2010) also conducted a content analysis on participant responses. In this study, a semi-structured interview was administered to a purposeful sample of 10 students enrolled in service-learning courses at two research universities. Her findings indicate that participants gain awareness and understanding of the disenfranchised communities in which they worked. McKay and Estrella (2008) identified common themes gathered with open-ended questions from 43 students enrolled in 20 service-learning courses at a large metropolitan university, and discovered that students improved their comprehension of social justice concepts and interest in community service. This body of qualitative research suggests that service-learning counters assumptions made by students about recipients who are racially, economically, and socially different from them. Students are situated in a service context which forces them to confront their own beliefs and formulate new attitudes that lead to potential changes in service participation.

Scholars have echoed similar sentiments about the influence from service-learning on attitude-formation and skill-development in quantitative investigations. Gallini and Moely (2003) conducted a survey with 142 service-learning and 71 nonservice-learning students enrolled in undergraduate courses in the College of Arts and Sciences at a private research university. Findings from this study indicate that service-learners have higher ratings of academic, interpersonal, and community engagement than nonservice-learners. Moely, McFarland, Miron, Mercer & Ilustre (2002) also conducted a pretest and a posttest survey study on political awareness, civic action, diversity, and social justice attitudes, and problem-solving and leadership skills with 217 service-learners and 324 nonservice-learners enrolled in the College of Arts and Sciences. These researchers found that students did not differ in scores at the beginning of the semester, but by the end of the semester service-learners had higher civic action, social justice, leadership, and problem-solving scores than did nonservice-learners. C. A. Payne (2000) similarly conducted a pretest and a posttest survey study on preferences for participation in service with 83 students enrolled in four sections of a service-learning course at a large public institution. His findings indicate that student apprehension decreased and participation in short-term service increased by the course end. Taken together, the quantitative research enhances the qualitative findings, and strengthens the perspective that the learning aspect of service-learning is the transformation of student thoughts, attitudes, and skills. Service-learning causes students to rethink their views of and reshape their interpersonal skills for community engagement.

Educators propose that the benefits derived from student participation in service-learning are also likely to be detected for undergraduates enrolled in service-based Honors courses

(Scott & Frana, 2008), although relatively few studies have been conducted on this group of students. In fact, much research in this area is descriptive and either depicts the service-learning project in Honors courses/programs or explains how the service context can serve as a lab and foster inquiry-based and problem-solving skills (Fink & Lunsford, 2009; Scott & Frana, 2008). Powell (2008) conducted an observational study that describes a semester-long project for six Honors students at a Christian college, and surmised that participants deconstruct their stereotypes after reflecting on the diversity reading material and the service experience. Gibboney (1996) conducted a longitudinal study with 13 students enrolled in an Honors seminar at a mid-size university and used a grounded theory technique to analyze their journals and papers. Participant reflections indicate that service-learning fostered beliefs about the importance of service, but that it did not contribute to active or ongoing service beyond the course. Student attitude-formation and skill-development are complex processes; however, service-learning may be a useful method for nurturing student perspectives about participation in service, but only if reflection is an integral part of the course. The current study builds on previous research and explores the differences in perceptions of service for undergraduate students enrolled in an Honors and a non-Honors section of a service-learning course. Two research questions are addressed in this study:

- (1) Did students who participated in an Honors section of a service-learning course show greater gains in attitudes and skills as indicated by increases in political awareness, civic action, diversity, and social justice attitudes, and leadership and problem-solving skills, social competence, and preferences for short- and long-term community engagement over the semester than those who participated in a non-Honors section of the course?
- (2) Did community partners have higher ratings of professional behaviors for students who participated in an Honors section of a service-learning course compared to those who participated in a non-Honors section of the course?

Research Setting

Course Content. The educational psychology course is a three-credit, two-hundred level, interdisciplinary course that fulfills a social science distribution requirement of the general education curriculum. This course also serves as a prerequisite for upper-level education courses and requires 15 hours of tutoring or mentoring as a service activity at a public school, an alternative school, and an after-school program to meet the National Council Accreditation for Teacher Education and the Pennsylvania Department of Education standards. The major goal of this course is to prepare students to work with children and adolescents at either a compensatory preschool or a public school. In-class time (50 minutes, 3 times per week, 15 weeks) began with a lecture on service-learning. The next two classes consisted of a two-hour orientation on mentoring and tutoring by guest speakers representing the three placements. The rest of the course is devoted to lecture, activities and discussion that correspond to the assigned readings in the text (Slavin, 2009). Topics covered in this course include: Characteristics of an intentional teacher, research methods, standardized testing and student assessment, learning theories, student diversity,

learners with exceptionalities and accommodations, and student centered approaches to teaching and effective learning environments. Students are required to complete three examinations, a journal guided by structured reflection questions, and two out of four essays. The essay assignment describes a case study about standardized testing and student assessment, student diversity, achievement motivation, or learning environments, and requires students to apply the course concepts, compare and contrast developmental, behavioral, and motivational theories, and integrate both theories and research to support their position about the proposed case. Service-learning is used as the primary pedagogical strategy in this course, and students are required to complete structured reflection questions after each hour of service so that they can describe their thoughts and feelings about the service activity and connect the service context to the course content. The course ends with a reflective discussion between students and teachers at each placement.

Service Context. Students either tutored or mentored children and adolescents who differ from them in race and culture at a public school, an alternative school, and an after-school program in a district that was under educational reform and governed by a private company to improve student performance on state assessment indicators. All educational programs in the district qualify for Federal Title funding for basic academic programming, because standardized test scores reveal that in the third grade less than 40% of the children score at a proficient level in Mathematics and only 46% score at a proficient level in Reading (Pennsylvania System of School Assessment (PSSA), 2007). The service activities were designed through a collaborative partnership with both elementary and alternative school principals. Teachers refined the activities that were used to boost student performance.

Honors Program. The educational psychology course was one of the first courses to be included in the institution's academic service-learning program and to receive a service-learning designation (2003-2004). In the fall of 2004, the Director of the Honors Program requested that the educational psychology course be taught as an Honors course during the spring of 2005. Although deliberations transpired about whether to require the service component for the Honors section of the course because the Honors Program consists of students from a range of disciplines that do not easily lend itself to work with children, the decision was made to maintain this requirement to meet the student demand from community partners. The Honors section of the course presented an opportunity to explore the differences in student perceptions of service and to give teachers a chance to assess their professionalism at the placement so that the university-community partnership could be strengthened.

The Honors program in general education offers a unique approach to higher education and is centered on the idea of making students critical thinkers through participatory learning in seminars that are relevant to the global world. Both seminars and colloquia differ from non-honors courses in that they are smaller and discussion-oriented (<http://www.widener.edu/academics/honorsprogram>). This program requires students to take introductory courses and advanced seminars and participate in social activities (i.e., dinners with professors), field trips, and campus or community service. Students in the Honors program function as a learning community in that they reside in the same dormi-

tory and participate in campus organizations together during all four-years of college (i.e., Academic Honor Societies, Presidential Service Corps, and Engineers without Borders), but still are integrated into the larger university community. The criteria for admission into the Honors Program includes a minimum SAT score of 1200 and a minimum high school grade point average (GPA) of 3.40. Students have to maintain a GPA of 3.25 to remain in the program (<http://www.widener.edu/academics/honorsprogram>). The educational psychology course served as an introductory course in the Honors program during the spring of 2005, but the service component did not fulfill the program's community service requirement. The Honors section of this course required students to take the same examinations and complete identical assignments as those in the non-Honors section, but students in the Honors sections were given additional diversity readings (i.e., White privilege, racial identity models) to develop a deeper understanding of the course content and service context. Students in the Honors sections also took part in a dinner and discussion at the instructor's home at the end of the semester.

Method

Participants

College Students. Undergraduate students from a private teaching university in a northern metropolitan area completed a survey about their attitudes and preferences for community engagement. Data were gathered from 46 students at the beginning and at the end of the semester during the 2005 spring semester. Most students identified themselves as White (96%) and female (83%) as shown in Table 1. Students in the Honors section ($\bar{X} = 3.70$) did not differ in demographics from those in the non-Honors section ($\bar{X} = 3.05$), except for college GPA $t(41) = -6.34, p < .000$. Independent t-tests and chi-square tests were used to compare demographic characteristics of students in both course sections. Most students in both course sections worked as tutors (90%) at a public elementary school (44%), an alternative school (23%), and an after-school program (33%).

Measures

A *Demographic Questionnaire*, developed by the researchers, was used to gather information on gender, race, age, GPA, and year in school.

The *Civic Attitudes and Skills Questionnaire (CASQ)*, developed by Moely, Mercer, Ilustre, Miron, and McFarland (2002), assessed civic attitudes and skills. The CASQ, an 84-item self-report questionnaire, yields scores on six scales: 1. Civic Action (respondents evaluate their intentions to become involved in the future in some community service): 2. Interpersonal and Problem-Solving Skills (respondents evaluate their ability to listen, work cooperatively, communicate, make friends, take the role of the other, think logically and analytically, and solve problems): 3. Political awareness (respondents evaluate their awareness of local and national events and political issues): 4. Leadership skills (respondents evaluate their ability to lead and effectiveness as a leader): 5. Social Justice Attitudes (respondents rate their agreement with items expressing attitudes concerning the causes of poverty and misfortune and how social problems can be solved): and 6. Diversity Attitudes (respondents describe their attitudes toward diversity and their interest in

relating to culturally different people). Internal consistencies for each scale ranged from .69 to .88, and test-retest reliabilities for each scale ranged from .56 to .81.

Table 1. Demographic Characteristics of Students Enrolled in an Honors and a Non-Honors Section of a Service-learning Course.

Demographics	Service-Learning Courses			
	Honors (<i>n</i> = 18)		Non-Honors (<i>n</i> = 28)	
	<i>n</i>	%	<i>n</i>	%
Age (M, SD)	9.44 (1.75)		19.17 (1.15)	
Gender				
Male	4	22	4	14
Female	14	78	24	86
Ethnicity				
White	18	100	26	93
Asian American		----	2	7
Year in School				
Freshman	8	44	15	54
Sophomore	6	33	7	25
Junior	1	6	4	14
Senior	18	17	2	7
College GPA (M, SD) ***	3.76 (.16)		3.05 (.44)	
High School GPA (M, SD)	3.47 (.65)		3.43 (.54)	
College Major				
Social Science	8	45	13	46
Humanities	0	---	1	4
Science	2	11	1	4
Education	4	22	13	46
Nursing	2	11	---	---
Engineering	2	11	---	---
Service Placements and Activities				
Public School	9	50	14	50
Alternative School	3	16	2	7
After-School Program	6	34	12	43
Tutor	16	89	24	92
Mentor	2	11	2	8
Continued to participate in service	8	44	17	61
Kept in contact with the placement	6	33	11	39
Participation in service in the future	9	50	21	75

Note. *** $p < .001$.

The *Community Service Involvement Preference Inventory (CSIPI)*, developed by C. A. Payne (2000) assessed community engagement. The CSIPI is a 48-item paper and pencil inventory designed to assess 4 preferences: 1. Exploration Involvement Preference (this score reflects the affective nature of apprehension common in new experiences, and it demonstrates the behavioral perspective that commitment is short term and is usually at the convenience of the helper): 2. Affiliation Involvement Preference (this score reflects behavior motivation for recognition and commitments tend to be infrequent and shorter in duration): 3. Experimentation Involvement Preference (this score reflects the desire to make a difference in the lives of others and to learn more about the community): and 4. Assimilation Involvement Preference (this score reflects cognitive processes with career and lifestyle decisions based on the service experience as a way to understand what it means to be a responsible citizen). Internal consistencies for Exploration ($r = .63$), Affiliation ($r = .70$), Experimentation ($r = .74$), and Assimilation ($r = .70$) preferences were modest.

The *Service-learning Performance Checklist*, developed by D. A. Payne (2000), measured community partners' satisfaction with student preparedness and professionalism. Scores for each item ranges from 1 to 5, and the higher score indicates greater teacher satisfaction with student preparedness. Alpha coefficient for 25 items is high ($\alpha = .81$).

The *Texas Social Behavior Inventory-Short Form (TSBI)*, developed by Helmreich and Strapp (1974 as cited in Bringle, Phillips, & Hudson, 2004), measured self-esteem and social competence. The TSBI is composed of 32 items, and items are added together to produce a full-scale score with a higher score indicating greater social competence. Reliability coefficients are high ($r = .85$).

Design and Procedure

A quasi-experimental research design was used to measure differences in student attitudes, skills, and preferences for community engagement between students enrolled in an Honors and a non-Honors section of a service-learning course from the beginning to the end of the semester. All of the participants completed an informed consent form and a pretest survey measuring civic attitudes and skills, social competence, and community engagement. Participants completed the survey, placed it in a coded, confidential envelope and gave it directly to the researcher. Surveys took about 45 minutes to complete. Students completed this survey again after they completed 15-hours of service. A research assistant administered a postservice survey to each teacher at each placement site. Teachers completed the survey on each participant with whom he/she was paired at their own pace and returned it in a coded, confidential envelope to the researcher. Each survey took approximately 20 minutes to complete. The teacher response rate was 87%, congruent with survey research (Rosenthal & Rosnow, 1991).

Results

A repeated measure analyses of variance with planned Bonferonni t pairwise comparisons was conducted to evaluate change in attitudes, skills, and preferences for community

engagement between students in Honors and non-Honors course sections from the beginning to the end of the semester. The pretest and posttest scores for CASQ, CSUPI, TSBI was the dependent variables and the Honors and non-Honors course section was the independent variable. There were significant main effects for time as shown in Table 2. Main effects for time indicate that students improved their diversity and social justice attitudes, leadership and competence, and affiliation involvement preferences for participation in short-term service projects. Students also decreased their apprehension for participation (i.e., exploration preference) and increased their desire to make difference in the lives of recipients through participation (i.e., experimentation preference) in service by the end of the term, regardless of whether they were in the Honors or non-Honors course section.

Table 2. Pretest and Posttest Mean Scores and Standard Deviations as a Function of Honors and Non-Honors Course Sections.

Measure	Time Points		Posttest		df	F
	Pretest M	SD	M	SD		
CASQ						
Course Value	39.00	5.47	38.48	6.33	41	.90
Civic Action	26.26	4.22	26.57	4.71	40	.70
Social Justice	28.92	3.61	30.92	4.40	40	15.75***
Problem-Solving	40.83	4.87	41.34	5.52	41	.31
Diversity	12.68	1.88	14.37	2.75	43	18.87***
Leadership Skills	9.83	1.25	14.58	2.63	41	140.05***
Political Awareness	17.37	3.85	18.88	7.14	43	2.93
TSBI	56.65	9.43	60.13	7.73	42	11.87***
CSUPI						
Exploration	32.91	3.56	30.27	3.39	42	24.78***
Experimentation	37.60	4.85	46.67	4.94	41	169.40***
Assimilation	41.64	5.97	43.02	5.31	42	3.22
Affiliation	25.19	4.51	33.90	5.59	40	128.15***

Note. MANOVA F ratios are Wilk's approximation. *** $p < .000$, * $p < .05$.

A multivariate analysis of variance (MANOVA) was conducted on the teacher evaluations to identify differences in professional behaviors for students enrolled in Honors and non-Honors course sections. There were no differences between the two groups. Teachers were generally satisfied with student work. Their evaluations revealed that they thought students in both sections were responsible (97%), empathetic (95%), and dependable (98%) as shown in Table 3.

Table 3. Community Partners Views of Students Enrolled in an Honors and a Non-Honors Section of a Service-learning Course.

Items	Extremely Dissatisfied	Somewhat Dissatisfied	Satisfied	Somewhat Satisfied	Extremely Satisfied
Attendance	0	0	5	49	46
Reports to community site	0	0	3	46	51
Accepts responsibility	0	0	3	38	59
Enthusiastic and interested	0	0	5	39	56
Appropriate appearance and dress	0	0	2	54	44
Courteous and cooperative	0	0	0	33	67
Emotional maturity	0	0	0	36	64
Exercises good judgment when working with the children	0	0	0	46	54
Sincere	0	0	0	36	64
Relates well to the children and staff	0	0	5	46	49
Shows initiative	0	0	8	49	43
Assumes responsibility for his own learning	0	0	6	47	47
Asks appropriate questions	0	0	3	54	43
Begins work on time	0	0	3	56	41
Appreciates suggestions	0	0	2	54	44
Completes assigned tasks	0	0	3	55	42
Exhibits competence	0	0	0	38	52
Progressively requires less supervision	0	0	5	36	59
Dependable	0	0	2	44	54
Follows directions carefully	0	0	3	43	54
Interactions are appropriate with children and staff	0	0	3	41	56
Develops a good rapport with children and staff	0	0	3	49	48
Level of empathy	0	0	5	49	46
Level of concern or compassion	0	0	5	51	44
Level of commitment	0	0	6	47	47

Discussion

The current study adds to the service-learning research with the inclusion of an Honors section of a service-learning course. The primary objective of this study was to detect if students enrolled in an Honors section of a service-learning course make greater increases in attitudes and preferences for community engagement over the semester than students enrolled in a non-Honors section of the course. We found that students increase their interest in working with diverse recipients, improve their understanding of the social dis-

parities in the community, and gain confidence and leadership skills by the end of the term, regardless of whether they were enrolled in an Honors or a non-Honors section of a service-learning course. Students also reduce their apprehension for participation in service and increase their desire to make a difference in the lives of recipients through participation in short-term service projects, consistent with previous research (Gibboney, 1996; Moely, McFarland, Miron, Mercer, & Ilustre, 2002; C. A. Payne, 2000) that suggests student interactions with recipients in a community context dismantles the attitudes and beliefs they have at the beginning of the semester, but it does not lead to continual participation in service beyond the course.

The lack of observed differences in attitudes and skills between students in an Honors and a non-Honors section of a service-learning course may be attributed to student major, the course content, and the service context. Most students who took part in the Honors and the non-Honors section of a service-learning course were education and social science (i.e., psychology, sociology) majors. Students who major in education and social science seek careers that involve helping behaviors; therefore, both student groups may have been willing to participate in service. The similarities in personal dispositions of education and social science majors may account for the lack of observed differences in preferences for service participation between students in the Honors and the non-Honors course sections. In addition, both student groups made improvements in their attitudes and skills over the semester, even though students in the Honors section were given additional reading assignments related to White privilege and racial identity development. The racial content may not have been fully integrated in the Honors section of the course. For instance, students were required to read articles on White privilege or racial identity development, but they were not required to apply this information to answer structured reflection questions in the journal assignment. If students in the Honors section were required to critically think about the relationships among privilege, power, and oppression then they may have acquired a deeper understanding of racial disparities compared to students in the non-Honors section. Moreover, the service context afforded students a chance to work with children who differ from them racially and economically in a public school system that has outdated computers and lacks basic educational supplies (i.e., paper, pencils). Both student groups may have been able to connect the service context to the course content pertaining to student diversity and effective learning environments, which in turn may have fostered their deeper understanding of educational inequities in a public school and enhanced their confidence to make a difference in the lives of recipients through short-term commitments to service. The combination of the educational psychology (i.e., student diversity, learning environments) content and the service context may further explain the lack of observed differences in attitudes for students in the Honors and the non-Honors course sections.

A secondary objective of this study was to provide community partners with an opportunity to evaluate student preparedness and professionalism in their service activities with recipients; and, to identify if teachers make higher ratings of the work ethic for students who participated in the Honors section than students who experienced the non-Honors section of a service-learning course, because of the rigorous requirements of the Honors program. Most teachers were generally satisfied with the attendance, appearance and at-

tire, and punctuality of students in both course sections. Their evaluations of both student groups also indicates that they thought students were responsible and dependable, exercised good judgment in their work with recipients, and established a commitment to the service-learning program at the placement. These findings are consistent with previous research (Ferrari & Worrall, 2000; Miron & Moely, 2006; Vernon & Ward, 1999) that found an overwhelming number of community partners have positive views of students, but organizations who had an active role in the planning and implementation phases of service activities are more likely to make favorable appraisals of their work skills.

The current study afforded us an opportunity to detect if it is worthwhile to include service-learning in an Honors course. Although students enrolled in an Honors course section did not differ in attitudes, skills, and preferences for community engagement from students in a non-Honors section, both student groups did transform their attitudes and skills. Students developed a deeper understanding of the educational inequities in an urban public school district and acquired leadership skills through participation in service-learning. Teachers made similar observations about both student groups and appraised them as self-starters who use sound judgment in their work with service recipients. The reliability of teacher and student reports suggests that service-learning is an effective strategy for teaching both Honors and non-Honors courses.

There are a few important contributions that can be made from this study which may be of value for faculty who are developing a service-learning course for the first time. Instructors will need to identify community partners and devote a great deal of time nurturing relationships with them, so that agencies are involved in the development and implementation phases of the service activity. It may be helpful for instructors to ask community partners how students could be of assistance or what are the unmet needs of the organization in which students could help and use their responses as a "starting point" for discussions about the type of service activities. Instructors will also need to negotiate service activities with community partners so that the activity not only fulfills an organizational need, but also allows students to connect the course content to the service context. Another suggestion is for instructors to incorporate new or revise existing objectives, activities, and assignments so that service is not simply an extra activity, but an integral part of the course. A key component in service-learning is reflection; therefore, instructors will need to infuse reflection in course activities and assignments. This could be done in a variety of ways such as incorporating questions about service on examinations, using case studies based on service experiences, and creating structured questions to guide daily journal reflections. A final suggestion is to include community partners in the development and implementation phases of the service-learning evaluation as a way to negate their perceptions of assessment as a burden. Instructors may want to ask community partners what student characteristics should be measured and which methods are less time-consuming for them to complete (i.e., checklists vs. open-ended questions). Assessment data should be shared with community partners and used to revise service activities. These suggestions may contribute to the enhancement of the university-community relationship.

Despite the mentioned benefits from this study, the results should be viewed in light of a few key limitations. The results from this study cannot be generalized beyond our sample of undergraduate students. The Widener student population is demographically homogeneous. Most participants were White and female who came from middle-class backgrounds and whose parents did not go to or complete college. In addition, there are selection effects associated with the small number of freshmen and sophomores in the Honors and non-Honors course sections. Students in the Honors section did not differ in attitudes and skills associated with community engagement from students in the non-Honors section; however, differences may have been discovered if this study was conducted during their junior or senior year of college. Moreover, there is probably internal validity limitations associated with the service activities at three placements in a poor, urban public school system. Students tutored or mentored children and adolescents where the majority of them were African-American and came from lower-income backgrounds at an elementary school, an alternative school, and an after-school program in a district that was under educational reform and governed by a private company. The service experiences are unique and unlikely to be observed by other participants at this or another school district at a subsequent time. Finally, the use of multiple data sources from students and teachers does not prevent participant bias in written materials. There is the potential for self-report bias and testing effects to be associated with participant pretest and posttest surveys, as well as there is the likelihood of social desirability effects to be associated with teacher reports. Researchers may want to expand this study to generalize the results beyond the current sample of students. A comparative study that measures differences in student attitudes and skills over time should be conducted with larger samples of students enrolled in multiple service-learning courses that are part of both the Honors and non-honors program in general education at private and public institutions to address this study's limitations. This would make an interesting future study.

References

- Bringle, R.G., Phillips, M.A., & Hudson, M. (2004). *The measure of service-learning*. Washington: DC: American Psychological Press.
- Conley, P. A., & Hamlin, M. L. (2009). Justice-Learning: Exploring the efficacy with low-income, first-generation college students. *Michigan Journal of Community Service, 16* (1), 47-58.
- Eyler, J. S., & Giles, D. E. (1999). *Where's the learning in service-learning?* San Francisco, CA: Jossey-Bass.
- Ferrari, J.R., & Worrall, L. (2000). Assessments by community agencies: How "the other side" sees service-learning. *Michigan Journal of Community Service Learning, 7*, 35-40.
- Fink, A. D. D., & Lunsford, M. L. (2009). Bridging the divides: Using a collaborative Honors research experience to link academic learning to civic issues. *Honors in Practice, 97-108*.
- Gallini, S. M., & Moely, B. E. (2003). Service-learning and engagement, academic challenge, and retention. *Michigan Journal of Community Service, 10*(1), 5-14.
- Gibbonney, R. (1996). Service learning and commitment to community: Exploring the implications of Honors students' perceptions of the process two years later. *Nonprofit*

- and Voluntary Sector Quarterly*, 25 (4), 506-524.
- McKay, V. C., & Estrella, J. (2008). First-generation student success: The role of faculty interaction in service learning courses. *Communication Education*, 57 (3), 356-372.
- Miron, D., & Moely, B. E. (2006). Community agency voice and benefit in service learning. *Michigan Journal of Community Service*, 12(2), 27-37
- Moely, B. E., McFarland, M. Miron, D., Mercer, S., & Ilustre, V. (2002). Changes in college students' attitudes and intentions for civic involvement as a function of service-learning experiences. *Michigan Journal of Community Service Learning*, 9(1), 18-26
- Moely, B. E., Mercer, S. H., Ilustre, V., Miron, D., & McFarland, M. (2002). Psychometric properties and correlates of the civic attitudes and skills questionnaire (CASQ): A measure of student's attitudes related to service-learning. *Michigan Journal of Community Service Learning*, 8(2), 15-26.
- Payne, C. A. (2000). Changes in involvement preferences as measured by the community service involvement preference inventory. *Michigan Journal of Community Service Learning*, 7, 41-53.
- Payne, D. A. (2000). *Evaluating service-learning activities and programs*. Lanham, MD: The Scarecrow Press.
- Pennsylvania Department of Education (2007). *Pennsylvania System of School Assessment(PSSA)*. Retrieved March 23, 2008. <http://www.pde.state.pa.us>.
- Powell, P. L. (2008). Honored to be part of service-learning. *Honors in Practice*, 97-109.
- Rosenthal, R., & Rosnow, R. L. (1991). *Essentials of behavioral research: Methods and data analysis (2nd edition)*. New York, NY: McGraw-Hill.
- Scott, R. I., & Frana, P. L. (2008). Honors 2025: The future of the Honors college. *Honors in Practice*, 29-33.
- Slavin, R. E. (2009). *Educational psychology: Theory and practice (9th edition)*. Upper Saddle River, NJ: Pearson.
- Sperling, R. (2007). Service-learning as a method of teaching multiculturalism to White college students. *Journal of Latinos and Education*, 6 (4), 209-322.
- Vernon, A., & Ward, K. (1999). Campus and community partnerships: Assessing impacts and strengthening connections. *Michigan Journal of Community Service Learning*, 6, 30-37.
- Widener University. Honors Program. Retrieved August 10, 2010 from <http://www.widener.edu/academic/honorsprogram>.
- Yeh, T. L. (2010). Service-learning and persistence of low-income, first-generation college students: An exploratory study. *Michigan Journal of Community Service*, 16 (2), 50-65.

Statistical Analysis of Cooperative Strategy Compared with Individualistic Strategy: An Application Study

Tawfik A. Saleh¹

King Fahd University of Petroleum and Minerals, Kingdom of Saudi Arabia

Abstract

The study investigates the effect of cooperative and individualistic learning strategies on the academic performance of students in the general chemistry laboratory. The samples of the study were divided into experimental and control groups. The hypotheses were first generated and, after collecting data, analyzed by an analysis of t-test at an $\alpha = 0.05$ level of significance. The findings revealed that a cooperative learning strategy is more effective than an individualistic strategy; and, the students in the cooperative group performed significantly better. The mean difference of the final examination of 6.80, $t = 6.10$, $p = 0.001$ indicated that the difference of the results for control group and experimental group was significant at $p < 0.05$. Students of cooperative groups, at the end of the course, were given a questionnaire to reflect their perception. Their response was positive toward the cooperative learning strategy. 90% of the students would like to help, get help and mutually discuss the labs with their partners. A majority of them were in agreement that working as a group to conduct an experiment could improve their teamwork skills as well. This study adds to the global discussion about the role of the University in preparing students toward teamwork.

Keywords: Cooperative learning, individualistic learning, general chemistry, laboratory, scholarship of teaching, effective teaching, teamwork.

In pedagogy, educators seek for a learning methodology to teach a specific subject properly so that students maximize learning. Learning appropriately occurs when students are actively involved in the construction of their knowledge (Mestre & Cocking, 2002). Generally, there are three major learning structures: competition learning, independent (individualistic) learning, and cooperative learning (Roon, et al., 1983). These three ways of learning lead to different interaction patterns and thus promote different learning outcomes. In competition learning, students perceive that they can achieve their goals if other students fail to do so. In independent learning, the achievement of each student is unrelated to others; there is no concern about competing for grades since there is an individualistic goal structure and student goal achievement is independent. In cooperative learning, students' goal achievements are positively correlated. Cooperative learning (CL) is defined as a technique for helping students to work together in small groups more

¹ Corresponding author's email: tawfik@kfupm.edu.sa

effectively to achieve shared goals with maximum learning (Johnson & Johnson, 1999). Johnson and Johnson (1989) have indicated that CL fosters creative thinking such that students in a group generated new ideas, strategies and solutions which are more powerful than those generated in individual learning. Also other studies have pointed out that CL helps to improve students' achievement and retention and develop more positive attitudes towards learning skills (Pressel, 1992; Nichols and Miller, 1994). It is more effective than competitive learning (Kolawole, 2008). Roon used CL groups in a biochemistry laboratory course for first year students and reported that the faculty were positive about CL impact (Roon et al., 1983). According to the educational literature related to CL methods, CL requires six principles. (1) Individual accountability: all students contribute to know and master the material, learn and share their knowledge and ideas with their teammates; (2) Positive interdependence: the success of all members in the group is linked through goals and materials so everybody should understand that his contribution is important in achieving the shared goals or tasks and others' understanding; (3) Cooperation as a value: students have to know that cooperation is not only a way to learn but it is a part of the content to be learned; (4) Equal participation: the structure of the goals to be learned should encourage and promote group members to fairly participate equally; (5) Simultaneous interaction: to ensure that more than one member is actively engaged at a time. At least one student gives the idea and the others receive the idea and mutually discuss it; and (6) Promotive interaction: students can have face to face interaction in at least part of the task (Johnson & Johnson, 1994; Johnson, Johnson, & Smith, 1998; Kagan, 1994; Jones & Jones, 2008; Jacobs, Power, & Loh, 2002; Jacobs, 2008). These six elements are used as a basis for implementing CL in this work due to its solid foundation in educational research.

This paper describes and statistically analyzes the application of CL as a strategy of introducing general chemistry laboratory to enhance students learning and satisfaction.

Objective of the Study

The purpose of the study includes the comparison of the academic performance of students taught with CL strategy and those taught with individualistic learning strategy in general chemistry laboratory.

Statement of the Problem

Despite its efforts to prepare students for the practice of chemistry, Chemistry departments confront challenges related to increasing diversity of students' backgrounds in basic science and the failure of many students to appreciate the important role of chemistry in the practice. In addition, many students are impatient with studying basic science because they are primarily motivated to enter their major of interest and do not perceive the direct relevance of the science of chemistry to their majors. To make chemistry interesting and to contribute to greater efficiency and effectiveness, a number of innovative approaches have been used in teaching including cooperative learning and individualistic learning. Thus, the main problem this study investigates is to determine which of these

learning strategies leads to better achievements of the students in the chemistry laboratory and to what extent do these learning strategies affect the learning outcomes.

Based on this, the author postulated the following question: Will those taught with a cooperative learning strategy and those taught with an individualistic learning strategy perform equally in chemistry laboratory?

Hypotheses

Based on the statement of the problem, the following hypotheses are generated and tested at an $\alpha = 0.05$ level of significance:

Hypothesis 1: There is no significant difference between the academic performance of students in experimental and control groups taught with individualistic learning strategy in the first three experiments.

Hypothesis 2: There is no significant difference between the mean academic performance of students taught with an individualistic learning strategy and those taught with a cooperative learning strategy during the other 8 experiments.

Methodology

Research Design and Implementation

Both an experimental group and a control group were established for this study. To determine whether there were any statistical differences between the control and experimental groups, an individualized learning strategy was used during the first three experiments for both groups. Then, starting with experiment four, the study was performed by using CL to teach some sections of students (experimental group) and using individualized learning to teach the other sections (control group). All students are taught the same experiments using the same materials, have the same facilities, and the same form of quizzes, assignments and exams. Specifically, the principles of CL were explained to the students of experimental group and they were instructed and encouraged to function as units in conducting the experiments, related laboratory concepts, calculations and the reporting of the data. On the other hand, the students in the control group were instructed and encouraged to work individually. Each student had to turn in individual report.

Students' performance in the laboratory was assessed in three ways: laboratory reports, quizzes, and a final examination. The laboratory reports included laboratory data and calculations. Uniformity of grading was encouraged by the use of detailed scoring keys. In laboratory quizzes, only laboratory-related material was included and questions required single word, sentence, or paragraph answers. At the end of the course, students were examined practically and theoretically.

Variables and Instruments

The independent variable in this study is the learning approach (cooperative learning vs. individualized learning), and the dependent variables are the students' achievements as measured by their report, quizzes and final semester examination scores, and their attitudes and perceptions.

The measuring instruments used in this study consisted of the experiments' reports, quizzes and final semester examination. The quizzes were designed to measure the performance of the students. The statistical tools used to analyze the experiments' reports, quizzes, and final exam scores in the study were the mean, the standard deviation, and the student t-test. Students also were asked to fill out a questionnaire to reflect their opinions and perceptions.

Validity and Reliability of the Instruments

The instruments were validated by content and face-to-face validity methods. For validity, the instruments were revised with the suggestions of the experts in the field. During the final week of the semester, some students in the experimental group were randomly chosen for face-to-face interviews.

Administration of the Instrument

A purposive sampling technique was used to divide the sample into two groups; experimental group taught using comparative learning and the control group taught using individualistic learning. In order to ascertain the homogeneity of the treatment groups, the same work scheme was used in explaining the experiments and introducing the quizzes and final exam. After treatment, the scores of both groups were collected and subjected to appropriate statistical analysis. The hypotheses were analyzed by analysis of the t-test at an $\alpha = 0.05$ level of significance.

Results and Discussion

Qualitative Findings

The attitudes of students were assessed in two ways: 1) by observation and discussion with students (face-to-face interviews) and 2) by administration of a written questionnaire. From the students' responses in the interviews and laboratory observation, most of them showed a very positive response and expressed that they like the CL method instead of the individualistic learning method. They welcomed the CL strategy and enjoyed learning and hoped that the teacher would continue implementing this strategy. It was observed that the students were motivated to perform better than their previous performance since they had a chance to mutually discuss the experiment with their partners. In the students' opinion questionnaire, administered at the end of the course, students in the experimental group were asked to respond to statements about the laboratory taught by cooperative learning. The results of this questionnaire are presented in Table 1.

Table 1: Students' perception about the application of the strategy.

Statement	%				
	SA	A	N	D	SD
I prefer to work individually to perform the whole experiment.	10	15	0	35	40
I prefer to work cooperatively with teammates to perform the experiment.	70	20	0	10	0
I like helping others understanding the content of the experiment.	70	20	10	0	0
I would like to get help from others understanding the content of the experiment.	30	40	10	10	10
Working cooperatively increases mutual discussion of contents of the experiment with teammates	70	20	10	0	0
Working cooperatively improves understanding the experiment	30	50	10	10	0
Working as a group to conduct an experiment increase positive interdependence	45	45	10	0	0
Working as a group to conduct an experiment improve the teamwork skills	70	20	0	10	0
Working as a group to conduct an experiment improve my laboratory skills	30	30	20	10	10
Working as a group to conduct an experiment make the lab more enjoyable and interesting	60	20	20	0	0
Ease and speed of the lab improve when we work as a group	35	35	10	10	10

SA: strongly agree; A: agree; N: neutral; D: disagree; SD: strongly disagree.

In general, the students were positive about the cooperative learning strategy. A majority of them preferred to work cooperatively, rather than individually, to conduct the experiments. 90% of them did like to help, get help, and mutually discuss the experiments with their partners. This led to positive interdependence. A majority of them were in agreement that working as a group to conduct an experiment could improve their teamwork skills.

Quantitative Findings

Hypothesis 1: As illustrated in Table 2, the results show that the control group obtained 80.67 mean score compared to the experimental group which obtained an 80.33 mean score. The mean difference of 0.34, $t = -0.277$, $P = 0.808$ indicated that the difference of the results between the control group and the experimental group was not significant ($p > 0.05$). Hence the null hypothesis is accepted at an $\alpha = 0.05$ level of significance. Thus, there was no significant difference between both groups when individualistic learning was used for both groups in the first three experiments (Table 2 & Figure 1). Therefore,

Table 2: Statistical analysis of reports' scores of pre-application of strategy.

Source of variation	Mean	SD	t_c	t_t	P	Result
Experimental group	80.67	7.30	0.277	1.96	0.808	NSS
Control group	80.33	7.40				

SD: standard deviation; t_c : student t-test calculated; t_t : student t-test tabulated; P-value; NSS: not statistically significant.

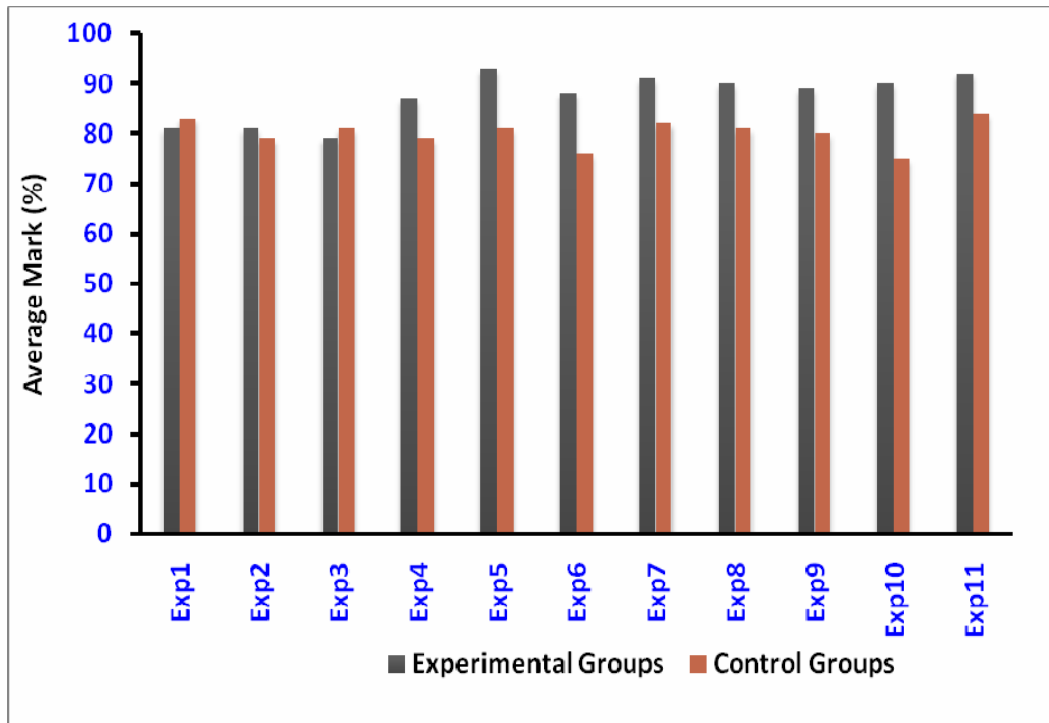


Figure 1: Mean experimental grades of students of both experimental and control groups.

before the study started, both the control and experimental group were not statistically different. Although the experimental group's mean score is 0.34 higher than the control group, the difference is not significant at $p < 0.05$ level.

Hypothesis 2: Table 3 shows that t-calculated value is greater than t-tabulated value; hence, the null hypothesis is rejected at an $\alpha = 0.05$ level of significance. This means there is a significant difference between the academic performance of students taught with cooperative and individualistic learning strategies in favor of cooperative learning strategy. After the application of the cooperative strategy, the analysis of the results in

Table 3: Statistical analysis of reports' scores of those taught with cooperative and individualized learning strategy (post-application).

Source of variation	Mean	SD	t_c	t_t	P	Result
Cooperative group	89.91	4.90	11.63	1.96	7.8×10^{-6}	SS
Individualistic group	79.75	7.70				

SD: standard deviation; t_c : student t-test calculated; t_t : student t-test tabulated; P-value; SS: statistically significant.

Table 3 showed that the students taught with cooperative learning strategy performed better than those taught with the individualistic learning strategy. The experimental group obtained a higher mean score of 89.91 as compared with the mean of 79.75 for the control group. The difference between the means scores of both groups is significant. The mean difference is only 0.34 during the pre-application of the strategy, and it increased to 10.16 after the application of the cooperative strategy (Table 3 & Figure 1).

The statistical analysis of the final semester examination mean scores for both groups was carried out. The results, as illustrated on Table 4, show that the control group obtained a 78.10 mean score as compared to the experimental group, which obtained an 84.90 mean score. The mean difference of 6.80 with $t = 6.10$ and $P = 0.001$ indicates that the difference between the control group and the experimental group was significant at $p < 0.05$. The experimental group had higher mean scores than those of the control group, and the results were statistically significant. Therefore, the learning through a cooperative strategy had produced positive effects.

Table 4: Statistical analysis of final examination scores.

Source of variation	Mean	SD	t_c	t_t	P	Result
Cooperative group	84.90	3.5	6.1	1.96	0.001	SS
Individualistic group	78.10	6.9				

SD: standard deviation; t_c : student t-test calculated; t_t : student t-test tabulated; P-value; SS: statistically significant

Conclusion

This study has proven that a cooperative learning strategy is more effective than an individualistic learning strategy in teaching the general chemistry laboratory. The advantage

of a cooperative learning strategy is not only to teach but also to create and enhance students' motivation, interest, and achievement. This definitely can bring about more effective learning. The study adds to the global discussion on the effect of the CL to enhance practical performance and understanding, and thus motivates the interest in the learning of practical subjects.

Recommendations

Based on the findings, it is hereby recommended that: cooperative learning strategy should be adopted as an effective learning strategy in order to improve student's performance, social interaction skills and foster meta-cognition in students. In addition, the results of this study provide guidelines for further research and are used to create innovative knowledge creation in other fields. The effectiveness of the cooperative learning strategy is recommended to be studied in other subjects.

References

- Jacobs, G. M., Power, M. A., & Loh, W. I. (2002). *The teacher's sourcebook for cooperative learning: Practical techniques, basic principles, and frequently asked questions*. Thousand Oaks, CA: Corwin Press.
- Jacobs, G., *Cooperative Learning: Theory, Principles, And Techniques*, JF New Paradigm Education, Retrieved in 2008, <http://www.georgejacobs.net>.
- Johnson D. W., & Johnson, R.T. (1989). *Leading the Cooperative School*, Edina, MN: Interaction Book Company.
- Johnson, D. W, Johnson, R. T., & Smith, K. A. (1998). *Active Learning: Cooperation in the College Classroom*, Edina, MN: Interaction Book.
- Johnson, D. W., & Johnson, R. T. (1994). *Leading the cooperative school* (2nd ed.). Edina, MN: Interaction Book Company.
- Johnson, D. W., & Johnson, R. T. (1999). Making cooperative learning work. *Theory Pract.* 38, 1–73.
- Jones, K. A., & Jones, J. L. (2008). Making Cooperative Learning Work in the College Classroom: An Application of the 'Five Pillars' of Cooperative Learning to Post-Secondary Instruction, *The Journal of Effective Teaching*, 8 (2), 61-76.
- Kagan, S. (1994). *Cooperative learning*. San Clemente, CA: Kagan Publications.
- Kolawole, E. B. (2008). Effects of competitive and cooperative learning strategies on academic performance of Nigerian students in mathematics, *Educational Research and Review* 3 (1), 033-037.
- Mestre, J., & Cocking, R. R. (2002). Applying the science of learning to the education of prospective science teachers. In: *Learning Science and the Science of Learning: Science Educators' Essay Collection*, ed. R. W. Bybee, Arlington, VA: National Science Teachers Association Press.
- Nichols, J., & Miller, R. (1994). Cooperative learning and student motivation. *Contemporary Educational Psychology*, 19, 167–178.
- Pressel, B. E. (1992). A Perspective on the Evolution of Cooperative Thinking, in Davidson and Worksham (Eds). *Enhancing Thinking Through Cooperative Learning*. NY, NY; College Teachers Press.

Roon, R. J., Van Pilsum, J. F., Harris, I., Rosenberg, P., Johnson, R., Liaw, C., & Rosenthal, L. (1983). The experimental use of cooperative learning groups in a biochemistry laboratory course for first-year medical students, *Biochemical Education* 11 (1), 12-15.

Using *Monopoly* to Introduce Concepts of Race and Ethnic Relations

Warren Waren¹

University of Central Florida, Orlando, FL 32816-1360

Abstract

In this paper I suggest a technique which uses the familiar Parker Brother's game *Monopoly* to introduce core concepts of race and ethnic relations. I offer anecdotes from my classes where an abbreviated version of the game is used as an analog to highlight the sociological concepts of direct institutional discrimination, the legacy of discrimination, colorblind racism, affirmative action, and reparations. I describe how, after playing the game, the participants spend a short amount of time debriefing in order to express their emotions and examine their motivations. Later, in a broader class discussion, I invite both participants and observers to explain the motivations, attitudes, and behaviors of all players and connect these explanations to theoretical concepts in sociology. After debriefing and discussion, I refer to the shared experiences of the students from the game in subsequent lectures and readings.

Keywords: Teaching race, simulation, monopoly, symbolic racism, colorblind racism.

Undergraduate students often enter our classrooms convinced that the battles of the Civil Rights Era solved the issue of race in America. They are generally unacquainted with the long history of race in the United States and almost universally underestimate the structural forces which carry racial disparities into their new century. As sociologists and teachers, it is our responsibility to tell that story and explain those forces. Our new challenge is: How do we teach students the extent of racism in America when, from their point of view, the problem of the color-line has been solved?

One option is to use a game. Sociologists have used games or simulations to spark the sociological imagination (Dorn, 1989; Jessup, 2001; Fisher 2008), to stimulate critical thinking (Pence 2009), and to introduce social stratification (Ender, 2004; Waldner & Kinney, 1999). When students from relatively privileged backgrounds "experience" a temporary bout of unfairness in a simulated game, it creates the opportunity to change their perspective (Coghlan & Huggins, 2004; Haddad & Lieberman, 2002). The injustice of the situation, if directly connected to broader theory, can lessen a student's social distance from marginalized groups. A game may help a student to understand some of the previously inexplicable attitudes and behaviors of actors on either side of a power rela-

¹ Corresponding author's email: wwaren@yahoo.com

tionship. Also, as this paper demonstrates, a properly constructed simulation can give the student a sense of the structural nature and lasting legacy of racial discrimination—a fuller sense of the “history and biography” of race in the United States (Mills, 1959).

The great advantage of a game is that it is a completely controlled environment—there are no unexplained variables. In fairness to all the players, all rules are explicitly stated at the outset of game play and apply to all players equally (Waldner & Kinney, 1999). Ordinarily, in a competitive game this assumption of fairness supports an ideology of individualism.

However, a pedagogical game is concerned with learning, not winning. In order to disentangle a complicated issue, the instructor may purposefully introduce inequality into an otherwise “just” world. Again, because all rules are explicit (even unfair ones), the problem exists in the game without confounding effects. This simplification allows students to easily focus on the nature and development of the problem. By extension, it is hoped that the game encourages students to reassess similar problems in the real world.

Use of Pedagogical Games

Dorn (1989) identifies multiple criteria for games or simulations to be effective in the classroom as pedagogical tools. He argues the games must: reflect reality; motivate students through “experience”; develop awareness of personal values through moral and ethical implications of the game; connect abstract concepts with concrete experiences; create a shared experience from which the students can draw; offer a form of debriefing to both address emotional issues and to connect theory to experiences. In the technique I describe below, I try to incorporate these ideas with Straus’ (1986) emphasis on simplicity for in-class games.

In teaching and learning, the goal of simulation is the “experience” itself. Jessup (2001) argues that simulation should be the “experiential anchor for the elaboration of conceptual tools” (p.108). Therefore, this game is created to offer a chance for relatively privileged students to experience the unfairness of structural inequality. After temporary exposure to an analog of racial discrimination, students with no prior familiarity of racial discrimination will have a deeper understanding of the effects of racism on many levels.

Pedagogical games are used to challenge our assumptions about how the world works (Waldner & Kinney, 1999). For example, the basic assumption of competitive games is fairness. This assumes that the world is fair (i.e., a meritocracy) and that individual effort or talent is the main factor in success (i.e., an ideology of individualism akin to Ross’ (1977) fundamental attribution error). In competitive games therefore, groups are treated equally and the best players win. But a pedagogical game may challenge the assumption of fairness directly by having structural inequality built into the game. The experience of a good player losing an unfair game creates cognitive dissonance—that cognitive dissonance is our teaching moment. I assume that students as game players can easily identify games that are “unfair” based on unequal outcomes for equivalent behavior. As a peda-

gogical tool, I want it to be relatively easy for them to spot the explicit rules which cause the inequality.

There are two main limitations to the use of pedagogical games in the classroom. First, as with any analog, the challenge of external validity is ever present. By definition, a simulation is a simplification of a complex phenomenon. If the essential nature of the phenomenon is lost in the simplification, then the results of the simulation cannot be usefully extended back to the outside world. We should be aware that the game world in which we play is created especially to illustrate a point—and therefore is biased by its nature. For example, the reality of race relations in the United States is much more complicated than any one-hour game. Second, games are not value free (Breznia, 1996). Those who make the rules also make assumptions about how the world works. Students who have strong views on a topic may show resistance to games that overtly contradict their positions. The games may have little teaching value if the students feel that their views are not acknowledged. Although this critique is important, one of the strengths of simulations is that it temporarily suspends previous experience. Students are exposed to new sets of values surreptitiously through the play of the game. After the game, students can openly decide to consider or ignore the new sets of values.

Issues in Teaching Race in the 21st Century

Our students are confident that they are already familiar with racism before they enter the classroom. Students from the Millennial Generation feel they have been raised in an environment of racial tolerance—from the observance of Black History Month to the election of the first black American President. They can easily identify discriminatory practices and have been sensitized to the inappropriateness of prejudicial attitudes. Although we have made significant progress in terms of race in the U.S. in the last few decades—our students often presume that we have successfully solved the problem completely. A small amount of progress is claimed as evidence of a victory. Their understanding of racism is often limited to a historical treatment of the traditional American racism of the Civil Rights Era. That is, their understanding is forty years old.

In fact, attitudes towards race and ethnicity have changed dramatically over the last forty years (Krysan, 2008). A new type of prejudice—colorblind racism (Sears & Henry, 2003; Bonilla-Silva, 2006)—has stepped in to fill the void left by the decrease in direct institutional discrimination. This new type of racism is rarely detected by students because of its emphasis on individual behavior and its dismissal of structural forces. Part of the insidious nature of colorblind racism is that it invites students to ignorance: to ignore the past; to ignore the effect of race-based structures; to ignore plight of their fellow Americans. There is little incentive to revisit the battles of the past.

How do we teach something our students can't see? In addition to highlighting the characteristics of colorblind racism and the legacy of discrimination in our lectures and readings, I propose that we give our students a chance to “experience” these phenomena directly in a simulated environment. A deeper, experiential understanding of these concepts will help our students understand the arguments of race-specific and race-neutral policies;

the opinions on reparations; the lasting effects of discrimination; and the subtle characteristics of colorblind racism.

Unfortunately, the use of games as pedagogical tools is not common in classes covering race and ethnicity (for a recent exception, see Harlow, 2009). Games are much more common in courses or lectures which focus on economic inequality (Breznia, 1996; Dorn, 1989; Jessup, 2001; Waldner & Kinney, 1999). In such classes, the games are often used to challenge the assumptions of meritocracy and the ideology of individualism. Sociology courses which focus on race and ethnicity also must confront notions of meritocracy and individualism. There are, however, distinct historic and economic structures which have created and perpetuated racial barriers. One difficult challenge for teachers of race and ethnicity is to create games which confront meritocracy and individualism, but at the same time recreate the oppressive social structure which dominates race relations.

Example from the Classroom

I have employed an abbreviated version of *Monopoly* to highlight issues of race and ethnicity in eight different classes over the last four years. I have used the game in classes of over one hundred students and in classes as small as ten. Because *Monopoly* is limited in the number of players, and because as a pedagogical tool I am not that interested in the strategy or game play of the students, I randomly select a small group of students (3-5) to take the roles as players at the front of the room while the rest of the students watch. I use *Monopoly* as a familiar construct, a safe place where everyone knows the rules. Then, I change the rules.

Monopoly is based on the assumption of equality of opportunity. This is the first rule I will break in order to highlight theoretical concepts related to race. Since the rules of games are usually explicit, my structural inequality will be explicit as well.

To set the scene for the game, I put a slide of the familiar game board on the screen for visual reference. I arrange my panel of players in front of the class. I am a player as well. We all introduce ourselves to the class, and I take note of the name of the last student in line (for my example here, let us assume her name is “Lydia”).

To illustrate this teaching strategy, I use italicized text for the role of the professor below; comments are in normal text.

Is everyone familiar with the Monopoly rule “Pass Go, Collect \$200”? Everyone circles the board; everyone passes ‘Go’; everyone gets \$200. However, anyone who is named ‘Lydia’ does not get any money as they pass ‘Go’.

And thus, I have handily created “name-based” discrimination through the concept of direct institutional racism (since this is explicitly stated as a rule). Then, we quickly begin the abbreviated game. I give a narrative to the class to speed things along:

I go around once; pass 'Go'; collect \$200. Jenny goes around once; passes 'Go'; collects \$200. Mark goes around once; passes 'Go'; collects \$200. Lydia goes around once; passes 'Go'; but does not collect \$200. Is everyone clear how this game works? Okay, now we are going to go around the board 349 times. How much money does each player have?

This question takes a little time to answer. I do not give the answer, so students take out their phones and start trying to do the math. I wait until more than one student arrives at the correct answer of \$0 for Lydia, \$69,800 for everyone else. In my role as professor, I act shocked at the outcome. I announce it's time to adjust the rules for a more equitable game:

Okay, clearly this is not working out for everyone [Professor gives a scolding look at Lydia for creating this new problem]. So now we'll change the rule: everyone who passes 'Go' gets \$200. The next turn is our 350th. On that turn Lydia will get \$200. But so will all of the other players. How much money will each player have then?

It usually takes a little less time to answer this math question. The class informs us that Lydia now has \$200 and everyone else has \$70,000.

There now Lydia, don't you feel better this time around? This time we have equality, right?

Lydia is typically pretty upset at this point. She has been singled out, through no fault of her own, and is being forced to lose this game in front of everyone. All she wants is a chance. The preceding question gives her an opportunity to share her concerns and needs—she needs more money before she will feel equal in this game.

[Professor adopts more patronizing tone] Now wait a minute! We just changed the rules to accommodate you. We, as the other players, didn't have to do that. It doesn't even benefit us because now there is one more person to buy stuff on the board. We didn't have to do that, but we did. And now you want more money? Where does this money come from? Surely you don't want to take the hard earned money of the other players. Or is it that you want more money for each time you pass 'Go'? A law that says, "People named Lydia get \$300 each time they pass 'Go'." We just gave you \$200, now you want more?

Of course, as the instructor, I am not too harsh here. I do not want to hurt my students to make a point. But cognitive dissonance is always uncomfortable. I offer a compromise:

Why don't you just hold on for a few years? Maybe 25 times around the board and you'll feel better. Students, how much money would each player have after 375 rotations?

Once again I give the students time to do the math. Not surprisingly, Lydia does not feel equal with \$5,000 compared with \$75,000 for everyone else.

At this point I terminate our abbreviated game and debrief each of the student players. Their emotions and experiences about this game are much stronger than their experiences in my more normal lecture classes. There is much more nervous laughter and more lively discussion in these classes than in my classes without simulations.

Application of *Monopoly* to Race Studies

In the class discussion which follows the game, I refer back to the interaction between Lydia and myself. That interaction, while not carefully scripted, is filled with detailed questions to illuminate specific theoretical concepts. I am confident my more advanced students of race would recognize these concepts the first time through. But for students from various majors in an introductory-level sociology course, these concepts crystallize during the discussion.

First, I ask the students to tell me what type of discrimination was used to create the inequality between the Lydias and the rest of the players. After some discussion, we arrive at direct institutional racism—an explicitly divisive legal system that is supported by a multitude of individual majority actors. This is “old school” racism and the students easily identify it.

Colorblind racism on the other hand is more difficult for them to spot. After some discussion of the game, however, the classes discover that colorblind racism starts when direct racism is stopped and equality is declared prematurely. Some discussions have touched on the fact that the so-called equality is declared by the majority, not the minority. Then, other characteristics of colorblind racism are illuminated (Sears & Henry, 2003): the minority seems impatient with new rules; the minority seems stuck on past problems; the minority might get too much in an effort to equalize; and that the differences will just disappear if the majority ignores the past. Each of these characteristics is discussed at length with a new understanding of the positions on either side of the Lydia-divide. The important point for emphasis here is that, these are feelings and motivations of *the majority*. It is the winners who feel this way, not necessarily the losers.

This short game of *Monopoly* also highlights the legacy of discrimination as well. Why circle the board 349 times? Because the first slave arrived from Africa in 1619, but blacks and whites were not legally allowed to live in the same neighborhoods until 1968—around 349 years (Feagin & Feagin, 1990). But wait. What if our former Supreme Court Justice was right? That we would no longer be subject to the legacy of race after the passage of time; say 25 more years (Krueger, Rothstein & Turner, 2005). The absurdity of her opinion is apparent in the face of 375 iterations around the board; separate 350 times; equal 25 times.

Usually the students have a passing knowledge of reparations and affirmative action—two radical solutions which most students have never considered. But in the game, these

two solutions to the “Lydia problem” are not radical at all. A dry definition of “reparations” comes alive for most students when they realize that this solution was mentioned in our game when Lydia was so far behind in funds and the other players were so far ahead. Why not share? Another solution, affirmative action, was also mentioned in our short game when we discussed giving Lydia extra income from circling the board until she reaches parity in wealth. In the simulation, it seems like a reasonable, efficient way to fix a structural problem. It allows everyone to continue playing and ultimately equalizes the playing field. Why does this seem so radical outside the classroom?

Discussion

Classes on race and ethnic relations are an open field for the use of simulations and pedagogical games. The advantages include giving students an “experience” with discrimination; helps students connect abstract theory with concrete experience; and it gives students a shared set of experiences from which they can directly draw to make informed, ethical decisions regarding race.

Using a game allows for a not-so-delicate treatment of a normally taboo subject. Addressing the “Lydia problem” is much easier for students to talk about than directly talking about the race problem in America. Pedagogical games can challenge individualistic assumptions and demonstrate the lasting effects of discrimination in a direct, but non-threatening way. The temporary and artificial nature of games lets the students join in without fear of ostracism. Particularly for relatively privileged students from the Millennial Generation, this game highlights some of the structural components of racial discrimination which would otherwise be hidden from view.

Also, games can be used to highlight many sociological concepts at once. I usually have the game *after* I have introduced all of the concepts in a previous lecture. Even then, my best students will usually fail to spot one or more of the concepts I am covering during the game. This demonstrates the complicated nature of race issues—that even in a simplified environment, there are many things happening at the same time.

In conclusion, I have found the discussions in these classes to be much better informed and richer—and more likely to be connected to personal experience. Students continue to refer to the concepts highlighted in the game throughout the remaining weeks of the semester. I invite other teachers to incorporate this approach and other games into their teaching preparations.

I would encourage two future developments to extend this technique. First, to add to the number of concepts introduced using *Monopoly*. For example, we have not addressed racial gaps in prison, occupations, or education. Also, residential segregation is a topic uniquely geared toward the *Monopoly* board. A second development would be the application of aspects of other traditional games to race concepts; such as chess (see Schelling’s 1971 classic simulation of the role of preferences in racial segregation using the chessboard and the moves of the pieces as an analog to residential mobility); or card games.

References

- Brezina, T. (1996). Teaching Inequality: A Simple Counterfactual Exercise. *Teaching Sociology*, 24, 218-224.
- Bonilla-Silva, E. 2006. *Racism Without Racists (Second Edition)*. Rowman and Littlefield
- Brym, R., & Lie, J. 2006. *Sociology: Your Compass for a New World*. Wadsworth.
- Coghlan, C., & Huggins, D. (2004). 'That's Not Fair!': A Simulation Exercise in Social Stratification and Structural Inequality. *Teaching Sociology*, 32(2), 177-187.
- Dorn, D. S. (1989). Simulation Games: One More Tool on the Pedagogical Shelf. *Teaching Sociology*, 17,1-18.
- Ender, M. (2004). Modified Monopoly: Experiencing Social Class Inequality. *Academic Exchange Quarterly*, 8(2).
- Feagin, J. R., & Feagin, C. B. (1990). *Social Problems: A Critical Power-Conflict Perspective*. Prentice Hall. Englewood Cliffs, New Jersey.
- Fisher, E. M. (2008). USA Stratified Monopoly: A Simulation Game About Social Class Stratification. *Teaching Sociology*, Vol. 36(3), 272-282.
- Haddad, A. T., & Lieberman, L. (2002). "From Student Resistance to Embracing the Sociological Imagination: Unmasking Privilege, Social Conventions and Racism." *Teaching Sociology*, 30(3), 328-41.
- Harlow, R. (2009). Innovations in Teaching Race and Class Inequality: *Bittersweet Candy and The Vanishing Dollar*. *Teaching Sociology*, 37(2), 194-204.
- Jessup, M. (2001). Sociopoly: Life on the Boardwalk. *Teaching Sociology*, 29(1), 102-109.
- Krueger, A., Rothstein, J., & Turner, S. (2005). Race, Income, and College in 25 Years: The Continuing Legacy of Segregation and Discrimination. NBER Working Paper No. 11445. <http://www.nber.org/papers/w11445>
- Krysan, M. (2008). Data Update to *Racial Attitudes in America*. An update and website to complement *Racial Attitudes in America: Trends and Interpretations, Revised Edition*, Howard Schuman, Charlotte Steeh, Lawrence Bobo, and Maria Krysan, 1997, Harvard University Press. <http://www.igpa.uillinois.edu/programs/racial-attitudes/>.
- Mills, C. W. (1959). *The Sociological Imagination*. New York: Oxford University Press.
- Pence, D. (2009). 'I'll Take Ideology for \$200, Alex': Using the Game Show *Jeopardy!* To Facilitate Sociological and Critical Thinking. *Teaching Sociology* 37(2), 171-176.
- Ross, L. (1977). "The intuitive psychologist and his shortcomings: Distortions in the attribution process." In L. Berkowitz (Ed.), *Advances in experimental social psychology* (vol. 10, pp. 173-220). New York: Academic Press.
- Schelling, T. (1971). Dynamic Models of Segregation. *Journal of Mathematical Sociology*, 1(2), 143-186
- Sears, D., & Henry, P. J. (2003). Origins of Symbolic Racism. *Journal of Personality and Social Psychology*, Vol. 85(2).
- Straus, R. A. (1986). Simple Games for Teaching Sociological Perspectives: Four Examples of the Do-It-Yourself Approach. *Teaching Sociology*, Vol. 14(2), 119-128
- Waldner, L., & Kinney, W. J. (1999). "Using Monopoly to Teach Social Stratification and Inequality in an Introductory Sociology Class." *Paper presented at the annual meeting of the American Sociological Association, Atlanta, GA.*

Interdisciplinary Team Teaching: An Effective Method to Transform Student Attitudes

Amanda Little¹ and Anne Hoel
Wisconsin-Stout, Menomonie, Wisconsin 54751

Abstract

In order to maximize student development in an interdisciplinary context, we implemented and evaluated a business-biology team teaching approach. The class project involved teams of environmental science and business students analyzing an industry stakeholder interested in participating in the development of a community composting network. We compared the results of this team-taught section with a more traditionally-taught business section with a sustainability emphasis, with the objectives of identifying student learning gains and reflecting, as faculty, upon the experience. In the affective domain, there was initial discomfort with the interdisciplinary team teaching method on the part of both faculty and students. In the cognitive domain, both team-taught and traditional sections perceived significant gains in understanding both business and natural systems, although the treatment group alone made significant ($P < 0.10$) gains in linking interdisciplinary thinking and an understanding of both business and natural systems to future success. These findings suggest that the affective and cognitive transformations experienced in team-taught settings are important for teaching expanded worldviews and diverse perspectives.

Keywords: Team teaching, active learning, interdisciplinary studies.

We investigated how team teaching strategies helped produce learning outcomes in the context of sustainability education. As teachers, we believed that we needed to move beyond our specific disciplines to engage students in an interdisciplinary learning process. Team teaching as a means of facilitating learning can have a highly positive impact on student learning outcomes, largely due to the increased opportunity for student participation that team teaching provides. The presence of more than one instructor in the classroom increases the occasions for student-teacher interaction (Wadkins, Miller, & Wozniak, 2006). We engaged diverse student groups from business management and science and placed them into an interdisciplinary learning environment in order to increase their appreciation of diverse viewpoints and solve a real community problem – developing a community composting food waste network. As the course progressed, the goal of students developing as thoughtful, open-minded individuals, emerged as a priority.

The instructors desired to test their theory that if sustainability education involves the coordination of business and science domains, studying how the two disciplines interrelate

¹ Corresponding author's email: littlea@uwstout.edu

within a college classroom would advance the knowledge base of how different teaching strategies can effect student development.

Our experience started with an identified need, and institutional support for making students' learning a hands-on experience. In our case, the growth of sustainability efforts both on campus and within the broader community encouraged a joint teaching effort between business and biology faculty. Choosing the subject to focus our course on came naturally, as both instructors were involved in environmental sustainability projects, and other universities have had success team teaching about sustainability (Hoare et al., 2008). Bringing together senior students in the Problem Solving in Environmental Studies (BIO 444) and Strategic Management and Business Policies (BUMGT 490) courses for a joint capstone experience was a logical fit. Science students are not familiar with the language of business, nor are business students familiar with the language of science. Working jointly on a community project incorporating both disciplines allows continuity of study and immediate opportunities to address issues encountered during a semester-long analysis. Structuring interdisciplinary courses around problems is a successful team-teaching approach (Silver & McGowan, 1996). The nature of "interdisciplinary" suggests doing something that can't be done individually and is not initiated by a single subject. Davis (1997) states that, "the ideal interdisciplinary course begins with a great idea that can come from anywhere. Once the course is established that idea grows and the course takes on a life of its own."

The primary objectives of this paper are to: 1) disseminate and reflect upon the course structure and development, 2) assess the efficacy of the pedagogy through qualitative and quantitative student outcomes, and 3) discuss peer and student interactions for those considering interdisciplinary team-teaching in the future.

Methods

The class project involved teams of environmental science and business students analyzing an industry stakeholder interested in participating in the development of a community composting network. Our interdisciplinary experience utilized problem-based learning to integrate theory, knowledge, and practice from business, social and natural sciences to explore current environmental issues and strategic challenges of varying types of organizations. Coordinating the planning, implementation and evaluation aspects of delivering a team teaching experience required ongoing fine-tuning of initial ideas and a broad belief in flexible delivery methods. The degrees of exploring new learning possibilities grew as the class progressed.

In order to better evaluate the contribution of team-teaching to student outcomes, we compared a team-taught section to a non-team-taught "control" section. In both sections, we expected that students would be challenged to develop an understanding of business systems and natural systems. The team-taught section focused on sharing relevant and applicable knowledge to help organizations contribute to the triple bottom line of strong profitability, healthy communities, and a healthy environment within the context of a business composting network.

General Course Structure and Development

The “treatment,” team-taught section consisted of 24 BUMGT 490 students and 1 BIO 444 student co-taught by a Business and a Biology Department faculty member. The “control” section consisted of 27 BUMGT 490 students taught by a single Business Department faculty member. BIO 444 was an initial offering to a relatively young but growing Environmental Studies cohort. Each course was composed of approximately 50% males and females. We did not investigate the role of gender in this study.

Each section had a semester-long project-based group learning experience, in which they applied knowledge of business strategies and environmental problem-solving to a real-world business problem. Much of the course curriculum was compiled from various business sources, but the course text was *Environmental Problem Solving: A How-To Guide* by Hughes (2007). Although it emphasized environmental applications, much of the framework presented by the text overlapped substantially with the business curriculum. Throughout the semester, students worked in groups to learn the components of a strategic business analysis. They then applied these concepts to their own business stakeholder and assembled the findings into a final synthesized report at the end of the semester. The environmental component was emphasized in both treatment and control sections by interaction with the text, and related business news articles and speakers. The treatment section was given an overarching problem, “How can Business X participate in a community composting network,” and a restricted selection of appropriate businesses. The control section was given more flexibility in that their business selection and problem definition was open-ended and not necessarily sustainability-focused. The control section did participate in a sustainability-related side project during the semester, however.

In both sections, the student voice was heard by beginning each session with a student-led current events discussion. As a senior capstone course, we encouraged students to choose topics that related to our subject matter, with at least one topic specifically dealing with sustainability. A variety of perspectives arose from the discussions, naturally modeling the collaborative classroom climate we were aiming for. As instructors we also shared reactions to the topic discussed while validating diverse viewpoints of classmates.

Since students in the treatment section had never participated in a team teaching experience, it was important that the value of doing so was stated clearly. As instructors, we chose to stress the advantages of looking at the world in a more holistic fashion. The job market demands multiple skills, and differentiating themselves from other business and environmental science students by possessing experience in both subject areas would be an asset to potential employers. Having access to two faculty members every class period to answer questions as they arose during a hands-on sustainability project was an advantage that we stressed. Realizing that our students may have been expecting a more traditional classroom experience than we were offering was also a consideration. In some cases, faculty must work hard to overcome students’ resistance; a good first step is to be clear about the format of the course right from the start (Helms, Alvis, & Willis, 2005).

Assessing Student Learning: Data Collection and Analysis

Assessment consisted of a set of quantitative pre- and post-surveys administered at the beginning and end of the semester in combination with three open-ended questions in the post-survey. Quantitative questions addressed student perceptions of their own values (Table 1). Qualitative questions addressed specific learning gains and student impressions of the learning environment. All survey forms are available in Appendix A. In order to reflect upon our own experiences as faculty members in a team-taught, interdisciplinary setting, we also kept journals throughout the experience.

Results

General course experience

Within the team-taught section, students were initially surprised by slightly different course content than they expected and the additional biology faculty member in the classroom. Many students had the business professor in previous business courses, but the environmental science curriculum was just ramping up. It took some time for them to realize that the team-taught experience was not going to “ruin their GPA” or create excessive amounts of extra work for them.

The classroom cultures of the control and treatment sections were vastly different. The treatment group, influenced by three vocal classmates, exhibited a pessimistic, “glass half empty” attitude for much of the semester. It was more antagonistic toward environmental sustainability principles and the open-ended, independent and project-based structure of the course. The students’ paradigm was that sustainable practices would be automatically costly, and not profitable to a business. These attitudes presented an obstacle to initially learning the sustainability and composting content.

As instructors, we modeled positive classroom behavior, and stressed the benefits of the team taught sustainability project. We also shared our belief, as well as that of potential employers, in the value of problem-solving and compromising with those holding diverse opinions. In order to encourage students to at least consider alternate paradigms, we discussed a series of current news articles that integrated sustainability and profitability, had students share sustainability-related current events, and invited a series of guest speakers that reinforced the profitability of sustainable activities. Students also contributed to the subtle paradigm shift in the classroom by sharing their research and reflecting upon their employment experiences during classroom discussions. We encouraged students to be respectful in their dialogues and to question their own beliefs.

Quantitative Survey

The quantitative survey responses of the treatment section changed significantly over the course of the semester, while the control group did not. In order to compare the general, multivariate survey of each group, we conducted comparisons based upon the eight survey responses using multi-response permutation procedure (MRPP) in the package PC-

Table 1. Quantitative results of pre- and post-surveys are means and (standard errors). A 95% confidence interval estimate is included with the change in score. Students in the control and treatment (interdisciplinary) sections gave responses on a scale of 5 = strongly agree to 1 = strongly disagree. Statistical differences in pre- and post-responses were assessed using the unpaired, two-sided T-test. Means with differing letter superscripts were significantly different ($P < 0.05$) using Tukey's HSD.

Question	Control section				Treatment section			
	Pre-	Post-	Change	P-value	Pre-	Post-	Change	P-value
<i>Positively-phrased</i>								
1. Interdisciplinary thinking is necessary to success in my field.	3.91 (0.16)	3.85 (0.13)	-0.06 ± 0.41	0.778	3.72 (0.17)	4.13 (0.13)	0.41 ± 0.43	0.061
2. Environmental sustainability issues are important in the business world.	4.50 ^a (0.17)	4.26 ^{ab} (0.15)	-0.24 ± 0.45	0.289	3.76 ^b (0.24)	4.08 ^{ab} (0.15)	0.32 ± 0.57	0.261
3. I have an understanding of both business systems and natural systems.	3.32 (0.15)	3.74 (0.14)	0.42 ± 0.41	0.045	3.40 (0.12)	3.75 (0.12)	0.35 ± 0.34	0.044
4. I feel that I can communicate effectively with professionals outside of my field.	3.82 (0.16)	4.07 (0.18)	0.26 ± 0.49	0.294	3.96 (0.18)	3.88 (0.18)	-0.09 ± 0.51	0.741
5. If I had a choice, I would request a course taught by instructors from different disciplines.	3.68 ^a (0.17)	3.59 ^a (0.16)	-0.09 ± 0.47	0.705	2.96 ^b (0.18)	3.17 ^b (0.21)	0.21 ± 0.55	0.450
<i>Negatively-phrased</i>								
6. A knowledge of multiple disciplines is not important for my future.	1.86 (0.18)	2.11 (0.19)	0.25 ± 0.53	0.351	2.04 (0.23)	1.79 (0.15)	-0.25 ± 0.55	0.368
7. It is not necessary for me to understand both business and natural systems.	2.27 (0.22)	2.33 (0.22)	0.06 ± 0.63	0.848	2.54 (0.25)	2.00 (0.19)	-0.54 ± 0.64	0.095
8. Communicating effectively with professionals outside my field is not important.	1.73 (0.24)	2.04 (0.24)	0.31 ± 0.68	0.365	1.96 (0.25)	1.75 (0.23)	-0.21 ± 0.68	0.537

Ord 5 (McCune and Mefford). The test indicated no significant multivariate difference between the pre- and post-survey responses of the control group (test statistic = -0.055, $A = 0.0004$, $P = 0.380$), but slightly significant differences between the pre- and post-surveys within the treatment group (test statistic = -1.419, $A = 0.0090$, $P = 0.091$). There was no significant difference between the initial surveys of the control and treatment groups (test statistic = -1.061, $A = 0.0074$, $P = 0.134$).

Despite a lack of overall difference, the treatment section initially exhibited a significant lack of appreciation for environmental sustainability issues, and a reluctance to participate in a course taught by interdisciplinary instructors in comparison to the control group (indicated by significantly more negative initial opinions on question 2 (Tukey's HSD, $P = 0.028$) and question 5 (Tukey's HSD, $P = 0.032$, Table 1). By the end of the semester,

the treatment section had made gains on question 2 so that it was no longer significantly different from the control, although students continued to express overall discomfort with the interdisciplinary pedagogical setting, with continued significantly lower scores on question 5 (Table 1).

Both student groups perceived significant gains in understanding both business and natural systems (Question 3, Table 1). The treatment group alone made significant ($P < 0.10$) gains in linking interdisciplinary thinking and an understanding of both business and natural systems to future success (Questions 1 and 7, Table 1). ANOVA of the data, analyzed by survey time and treatment, revealed few significant relationships, although trends are consistent with the T-test analyses presented here.

Qualitative Survey

Student qualitative responses to the open-ended post-questionnaire revealed that students within the treatment group were more aware of environmental perspectives over the course of the semester. Both control and treatment sections were asked to “List activities in this course that expanded your perspective or changed your thinking.” A majority of students within the control section listed traditional course activities, with only four out of seventeen describing sustainability or “expanded thinking” in their responses. Within the treatment section, twelve out of 22 comments related to integrated course outcomes, with ten sustainability-related comments, and seven interdisciplinary perspective comments.

When asked to, “Explain how environmental sustainability concepts apply to your future career,” students in both control (14 of 15) and treatment (22 of 23) sections expressed an ability to see the relevance of sustainability concepts.

Finally, we asked students to “List the benefits or detriments that [they] experienced in this collaborative learning environment.” More students in the treatment section (22 to 23 out of 24) responded to open-ended questions, compared to the control section (15 to 17 out of 27). A larger number of students within the treatment group perceived benefit from sustainability-related gains than did the control group (Table 2). Due to the collaborative course structure, students in both sections perceived benefit from working with group members who had different perspectives. Individuals in the treatment section experienced both benefit and detriment from the multiple-instructor setting, although only a small number of students focused on this aspect of the course. Students within the treatment group were more vocal about detriments than those in the control group (who expressed none, Table 2). Despite completing the same set of business exercises as the control group, two students within the treatment group felt deprived of business experiences.

Table 2. Categorization of student comments in response to the question, “List the benefits or detriments that [they] experienced in this collaborative learning environment”.

	Control (n = 15)	Treatment (n = 23)
<i>Benefit</i>		
• Sustainability information	2	7
• Variety of perspectives	5	6
• Working in a group with others	5	2
• Different teaching styles	-	2
• Activities/Field trips	3	-
<i>Detriment</i>		
• Lack of business exercises	-	2
• Two different teachers	-	1
• General lack of support	-	2

Discussion

Expanding Student Perspectives

The results suggested that, although students are able to learn sustainability-related concepts within a non-team-taught course, the presence of the interdisciplinary faculty member reinforces the importance of alternative viewpoints and perspectives to a much greater degree. Other researchers have found that team teaching results in significant gains in student attitude and modes of thinking, (Carpenter, Crawford, & Walden, 2007). Yellowley and Farmer (2006) also found that team teaching resulted in improved student process in problem-solving. However, several researchers found no gains in student learning or attitude in their study of team teaching (Dugan & Letterman, 2008; Wadkins, Miller, & Wozniak, 2006). Our findings suggest that team teaching is worthwhile in courses in which worldview and attitudinal change are primary goals.

Faculty Lessons Learned – Essential Elements of Effective Collaborative Teaching

Faculty choosing to participate in a team teaching experience need to carefully consider their expectations. Selecting an appropriate team teaching partner is very important. The process involves each person asking themselves if they can remain open-minded, share control, and not become easily offended. Robinson and Schaible (1995) recommend that collaborative team teaching be limited to two people, as good team teaching is too complex with more than two teachers. They insist that a “healthy psyche” is needed to achieve desired outcomes, as is “disagreeing amicably.” Within our individual disciplines, we were challenged to think in new ways to explore the topics, moving outside our comfort zones (Silver & McGowan, 1996). A natural roadblock within this process included faculty trained in their own discipline, as this training leads itself to conflicting viewpoints (Silver & McGowan, 1996; Shibley, 2006). Jointly navigating beyond such roadblocks is where ideas for reaching our students most effectively occurred. Being able to dialogue professional views in the presence of students as questions arose strengthened our knowledge and modeled the realities of the workplace for students. Team teaching also requires different preparation than traditional, single-instructor courses, particularly concerning organizational aspects of course management. Careful and extensive planning

can help instructors prevent disagreements down the line regarding assignments, grading procedures and teaching strategies (Letterman & Dugan, 2004; Wentworth & Davis, 2002).

Specific suggestions for planning an effective interdisciplinary experience:

- Notify students in advance of the course so that they may “opt-out” of the interdisciplinary section.
- Make sure that interdisciplinary integration is one of the core goals of the course, and that students understand this. Stress that the experience involves expanding knowledge in an interactive environment. Initial uncertainty of how information from two disciplines will come together to form a cohesive project is natural and part of the learning process.
- • Provide numerous project possibilities to assist in selecting a workable issue that encourages student success. For example, in the treatment group, we chose to emphasize a common community problem and suggested business participants. In the control group, students chose their own problem-focus and therefore took more ownership of the project.
- Achieve a good balance of students from different disciplines within the course so that they can inform each other.
- Guiding students outside of their comfort zones in researching unfamiliar topics is part of the process. Sharing the benefits of shared research when team members possess divergent skills and knowledge can allay fears and motivate students to explore unfamiliar areas of study.
- Value and acknowledge each others’ distinctive teaching styles. Sincere praise and requesting clarification of unfamiliar teaching techniques role models the behavior for students.
- Ensure that both faculty team members are equally invested in the process of creating assignments and the overall course / grading structure. If not, one faculty member may feel excluded and “clueless,” while the other may feel overly responsible for the course.
- Maintain flexibility in scheduling daily activities and delivery of information.

Conclusion

The objectives of student attitude transformation and environmental sustainability awareness can be achieved most effectively in an interdisciplinary team-taught course. This type of capstone experience mirrored a workplace environment in which multiple viewpoints are valid and flexible connections must be made between natural processes, business models, and societal needs. This interdisciplinary experiment led to significant learning outcomes by changing student attitudes, expanding worldviews, and sharing diverse perspectives.

References

- Carpenter II, D.M., Crawford, L. & Walden, R. (2007). Testing the efficacy of team teaching. *Learning Environment Research, 10*,53-65.
- Davis, J.R. (1997). *Interdisciplinary Courses and Team Teaching*. Phoenix: American Council on Education/ Oryx Press_Series on Higher Education.
- Dugan, K.B., Letterman, M.R. (2008). Student appraisals of collaborative teaching. *College Teaching, 56*,11-15.
- Helms, M.M., Alvis, J.M., & Willis, M. (2005). Planning and implementing shared teaching: an MBA team-teaching case study. *Journal of Education for Business, 81*, 29-34.
- Hoare, A., Cornell, S., Bertram, C., Gallagher, K., Heslop, S., Lieven, N., ... Whitmore, C. (2008). Teaching against the grain: multi-disciplinary teamwork effectively delivers a successful undergraduate unit in sustainable development. *Environmental Education Research, 14*, 469-481.
- Hughes, J.W. (2007). *Environmental problem solving: A how-to guide*. Burlington, VT: University of Vermont Press.
- Letterman, M.R., & Dugan, K.B. (2004). Team teaching a cross-disciplinary honors course: Preparation and development. *College Teaching, 55*, 76-79.
- McCune, B., & Mefford, M. J. (2006). *PC-ORD, Multivariate analysis of ecological data, Version 5*. MjM Software, Gleneden Beach, OR.
- Robinson, B., & Schaible, C. (1995). Collaborative teaching: Reaping the benefits. *College Teaching, 43*, 57-60.
- Shibley Jr., I.A. (2006). Interdisciplinary team teaching: Negotiating pedagogical differences. *College Teaching, 54*, 271-274.
- Silver, W.S., & McGowan, R.P. (1996). Adventures in team teaching. *Journal of Management Education, 20*, 435-445.
- Wadkins, T., Miller, R.L., & Wozniak, W. (2006). Team teaching: Student satisfaction and performance. *Teaching of Psychology, 33*,118-144.
- Wentworth, J., & Davis, J.R. (2002). Enhancing interdisciplinarity through team teaching. In C. Hayes, (ed.) *Innovations in Interdisciplinary Teaching* (pp. 16-37). CT: The Oryx Press.
- Yellowley, W., & Farmer, M. (2006). Team teaching in higher education: Reflections on the added value of team teaching on student and staff learning experiences. *International Journal of Learning, 12*, 85-89.

Student Engagement and Teacher Practices: Using Hillary Clinton's Presidential Campaign for Learning Purposes

Sibylle Gruber¹

Northern Arizona University, Flagstaff, AZ 86011

Abstract

In this article, I reflect on the pedagogical decisions I made when I taught a course on gendered literacies during the 2008/2009 presidential campaign. I specifically focus on what I term the “Hillary” phenomenon, the media’s often negative and unflattering portrayal of presidential candidate Hillary Clinton. I start with a brief exploration of my goals for teaching current events; I then discuss student perceptions of Hillary Clinton’s role in politics, and I show the importance of paying attention to students’ social influences that, in Arizona, are often marked by “fear and trepidation” when it comes to political change. I show the importance of using examples from Clinton’s writing, and I point toward pedagogical reasons for engaging students in discussions that address our positionalities in a variety of discourse communities. I conclude by pointing out that we need to encourage students to think critically about their own roles in perpetuating current value systems by challenging their assumptions about gender roles, race relations, sexual orientation, or class systems.

Keywords: Classroom practices, women and politics, women and the media, gender discrimination, social expectations, discourse communities, identity and literacy development.

“Hillary will never be President. She is a woman!” This utterance did not come from George W. Bush, or from any of the opponents in the 2008 presidential campaign. It didn’t even come from the NPR announcers who seemed to disapprove of Clinton’s campaign from the day she decided to run. It wasn’t Rush Limbaugh either. It was Marilea, one of my students in a rhetoric seminar I taught in the Fall of 2008. She was 23. She was an English major. She had taken several classes focusing on rhetorical principles. Now she was enrolled in “Gendered Language Uses,” a senior seminar that asked students to apply the rhetorical principles they learned about throughout their undergraduate career to readings, audio, and video that specifically focused on gendered language uses. We used Hillary Clinton’s run for presidency as an example of women’s role in politics, encouraging them to think critically about the historical and contextual roles that women have played in U.S. society.

¹ Corresponding author's email: Sibylle.Gruber@nau.edu

In this article, I want to reflect on the pedagogical decisions I made when I taught a course on gendered literacies during the 2008/2009 presidential campaign. I specifically focus on what I term the “Hillary” phenomenon, the media’s often negative and unflattering portrayal of presidential candidate Hillary Clinton. I start with a brief exploration of my goals for teaching current events; I then discuss student perceptions of Hillary Clinton’s role in politics, and I show the importance of paying attention to students’ social influences that, in Arizona, are often marked by “fear and trepidation” when it comes to political change. I show the importance of using examples from Clinton’s writing, and I point toward pedagogical reasons for engaging students in discussions that address our positionalities in a variety of discourse communities. I conclude by pointing out that we need to encourage students to think critically about their own roles in perpetuating current value systems by challenging their assumptions about gender roles, race relations, sexual orientation, or class systems.

Contextualizing Classroom Discussions: Women’s Roles and “Hillary’s” Run for Presidency

Already in 1938, John Dewey let us know that “attentive care must be devoted to the conditions which give a present experience a worthwhile meaning” (p. 49). All individuals, Dewey pointed out, contribute to the process of meaning making (p. 56). Some 30 years later, Freire (1968) discussed “problem-posing education” where students and teachers engage in dialogue where “the teacher is no longer merely the one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow” (p. 67). This emphasis on critical literacy, later revisited by scholars such as Henry Giroux (1992), bell hooks (1984), James Paul Gee (1987), and James Porter (1986), appealed to my own belief that learning takes place in context. In other words, as Freire and Macedo (1987) pointed out so convincingly, teachers need to read the word as well as the world in which our students function. My pedagogical framework, in other words, was influenced by my belief that learning is contextual, and that current events can contribute greatly to students’ acquisition of critical literacy skills which are not only necessary in academic settings but also in workplace settings and in the day-to-day interactions with friends, family, and community members. It was also shaped by Manuel Castells’ (1997) concept of “project identities” which allow students and teachers to “build a new identity that redefines their position in society and, by doing so, seek the transformation of overall social structure” (p. 8). To accomplish this, it is necessary to leave our comfort zones and to address preconceived notions, stereotypes, and, most importantly, strategies for transforming and changing how we construct ourselves within a specific community.

Marilea’s comment about Clinton’s weakness — being a woman — was part of a presentation to her classmates. Her unwillingness to consider the implications of her comments, did not follow the pedagogical concepts I had outlined at the beginning of the course on gendered language uses, nor did it follow the notion of critical literacy acquisition. For her talk, Marilea had chosen Hillary Clinton’s and Barack Obama’s language patterns during the presidential campaign. She had put together a PowerPoint presentation, and she had brought in a video clip of Clinton and Obama during one of the final debates,

where discussions ranged from economic stimulus packages to the war in Iraq, to health-care, and to gay marriage. I expected that Marilea would follow up her initial statement by further explanation that would show that this sentiment was untenable in 2008. She would, I was sure, let us know that she based her statement on historical data — women have historically been discriminated against in politics, the workforce, and education¹. We had all heard of the famous glass ceiling. We had discussed the scarcity of women CEOs, and the “glass cliff,” a term coined to show the “precarious and short-lived” tenure of female executives (Proudford, 2007, p. 434). We had a hard time naming women politicians except for Hillary Clinton, Janet Napolitano and Dianne Feinstein. We had read that, historically, women were placed into nurturing roles, not those of politicians. We had read Anna Julia Cooper (1892) and her argument for the higher education of women. Marilea had written a very pertinent response paper on Cooper’s (1892) expose of the follies of late 19th century attitudes toward women’s roles in private and public spheres. My students couldn’t fathom that anybody could still consider women as dangerous if they were educated. Such attitudes were outmoded and would never enter into 21st century discussions on gender roles. We were, they all agreed, “way beyond” this kind of thinking.

Why then, did she insist that “Hillary will never be president”? Why did she use the candidate’s first name when we had just talked about how we show respect by using last names? I imagined and hoped that Marilea would include a slide that discussed current U.S. politics, popular culture, media coverage, and how easily people are influenced by what is handed to them on a media platter. We had spent more than two months analyzing a multitude of texts, videos, images, and sound clips to dig deep into what influences American perceptions of gender and sexuality. But my very bright and very conscientious student didn’t offer any further insights about her statement. And I didn’t get a chance to ask additional questions to encourage students to do what I thought I had taught them throughout the semester: think critically, apply the rhetorical principles to question modernist truth, explore their own biases, and reflect on the irresponsibility of unfounded assumptions.

Instead, the rest of the class of mostly Anglo working and middle-class 21-26 year olds chimed in. Angelina called out: “You are right. There is no way she’ll get enough votes. It would be Bill Clinton all over again.” Michelle followed up: “She is a bully. She doesn’t even want to talk to the press.” And Theresa delivered the ultimate condemnation: “Did you see the dress she wore? And her hair? She needs a fashion consultant.” Joey brought in the dreaded husband: “What would Bill do? He’d run the country again. He couldn’t help himself.”

Opinions were shooting from one end of the classroom to the other. I could feel the missiles being directed at Clinton, the personification of what seemed to be scary, unprecedented, unwanted. I was reminded of the words of Anna Julia Cooper (1892) when she points out the reasons why many men did not want to sanction the higher education of women, “higher education was incompatible with the shape of the female cerebrum, and that even if it could be acquired it must inevitably unsex woman, destroying the lisp, clinging, tenderly helpless, and beautifully dependent creatures whom men would so he-

roically think for and so gallantly fight for, and giving in their stead a formidable race of blue stockings with corkscrew ringlets and other spinster propensities” (p. 65).

In this excerpt, Cooper (1892) discusses 19th century male attitudes and fears about women’s education, but her comments come very close to what students found so “un-womanly” in Clinton, and what the media had promoted for many years. For example, Camille Paglia (1996) in *The New Republic*, pegged Clinton as an ice queen, a drag queen, a snow queen, a man-woman, and, if that’s not enough, a bitch-goddess (pp. 24-26). A *Spy Magazine* (1993) cover shows Clinton barely clad in black leather lingerie, evoking an image of a dominatrix who will use her sexuality to her best advantage (Cover photo, 1993). Media portrayals of Clinton’s harshness, single-mindedness, coldness, unsmiling countenance, and unemotional behavior reinforced stereotypes and fears that Cooper (1892) had already discussed more than one hundred years ago.

My students had read Cooper (1892) and many other texts on women’s changing roles in society and also on media’s influence on gender stereotyping. Our previous discussions of historical and current gender issues made the initial out-pouring of anti-Clinton sentiments even more surprising. To analyze our reactions, I decided to revisit some of the feminist scholars we had read in class, and to investigate our strong, largely emotional, reactions to Clinton’s candidacy in light of the theories we had discussed. We needed to explore the exigency for our emotion, the imperfection in our midst (Bitzer, 1968) that provoked our responses. We needed a new president, certainly, and we needed to decide, as a country, who the best choice would be. And before all that, we needed to decide who would be the candidate for the Democratic Party. The Republicans had already chosen John McCain, and he had already chosen Sarah Palin. Why did my students harbor such strong feelings against Clinton, and why did I want to support her and defend her against the negative outpourings? Why was Barack Obama considered a better choice, and why was Palin considered a great running mate for McCain by two thirds of the students in my class?

I knew that my students were aware of scholarship that addressed women’s historical, social, and political roles in the U.S. Why, then, could they not apply the critical thinking skills that they had honed over the course of the semester? Why did emotion outshine reason in both my male and female students? If I prescribed to John Gray’s (1992) theory that “men are from Mars, and women are from Venus,” then we should at least have had some of the students move away from emotion and give some space to reason. If I thought that Deborah Tannen (1990) was right when she explained that the phrase “you just don’t understand” refers to the overall inability of men and women to communicate successfully, then why were my male and female students so successful in their communicative endeavors to undermine Clinton’s intellectual endeavors, her professional success, and her political run for presidency?

As Freire and Macedeo (1987) have pointed out, the world around us shapes our approaches to the words we learn and the words we use. In retrospect, my initial reading of students’ “words” did not include a reading of the “world” that they inhabited. Certainly, our backgrounds, our cultural, social, political, and religious affiliations had an impact on

our understanding of who the best choice for president would be. Students understood the need to elect a president because George W. Bush was leaving office. To some, this was an imperfection, “a defect, an obstacle, something waiting to be done, a thing which is other than it should be” (Bitzer, 1968, p. 221). Life, they were sure, would be easier if he could stay for a third term. According to many, Bush had done an excellent job saving us from terrorism, bringing democracy to Iraq, and making sure that America’s foes were kept in check and aliens were kept out of Arizona. But since the American constitution needed to be upheld, it was urgently necessary to elect a president who would continue to support Bush’s policies on war, taxes, education, and healthcare. It was also paramount to make sure that neither Hillary Clinton nor Barack Obama would stand a chance in the elections, and that instead John McCain would be elected as the next president.

It was not surprising to hear these sentiments from my students. The university is happily situated in McCain country and in a state that has voted Republican for many presidential elections. But there were some exceptions. From the 1932 to the 1944 presidential elections, Arizonans voted for Franklin Roosevelt four times, and even though Bill Clinton did not get the Arizona vote in 1992, the population revised its opinion in 1996 and voted for him 47 to 44 percent (Leip, 2009). Most students didn’t remember that the state had voted for Bill Clinton. They also didn’t know that different counties within the state had almost exclusively voted Democrat ever since the inception of the state, including the county in which their current academic institution was located. All they knew was that they needed to be worried about changes in gun control legislation, abortion, and religious freedom. Hillary Clinton, for many, personified a disruption to long-held beliefs. It was a disruption that needed to be stopped.

Contexts and Texts: Opinions Unveiled

When I reflected on my reactions to students’ comments, I realized that I needed to put into practice my theoretical understanding of Bitzer’s discussion of rhetorical situations. Clearly, students saw a reason why this situation — the election of a new president — called for a specific response. I was teaching in Arizona, which was and is McCain territory. However, we also had enjoyed a successful and well-liked woman governor for many years. Janet Napolitano wasn’t only a woman; she was a Democrat in a majority Republican state. Arizona media outlets were mostly kind to her when she supported education, health care for everybody, and immigration reform. Sarah Palin was also greeted by a supportive media in the State of Arizona, but Hillary Clinton’s reception was harsh and biting.

It would be too easy to blame students for making uninformed statements without looking more closely at what influenced their decisions and their comments. Their statements might have been very well informed. The news talked about “Hillary” as if they owned her but didn’t know what to do with her. She was Hillary mostly, Clinton hardly ever. *Saturday Night Live*, a major news source for many of my students, portrayed her as pushy, catty, frumpy, unemotional, uncaring, and willing to walk over dead bodies. Although SNL was trying to be funny and sarcastic, the unflattering portrayal of Clinton seemed to have stuck with many of my students. It was reinforced by most media outlets,

and was taken to new heights by the right. Michelle Malkin (2007) uses “The Frightful Specter of Hillary Clinton,” as one of her headlines (Malkin, 2007). Phyllis Schlafly (2008) argues that Clinton lost the presidential campaign “because she simply is not likeable,” and she blames “the whining” of feminists (especially Steinem) for the misconception that women have not achieved equality in the United States (Schlafly, 2008). And Ben Shapiro (2007), who also authored *Brainwashed: How Universities Indoctrinate America's Youth*, sees her as using a “passive-aggressive victim role” (Shapiro, 2007) If Bill was the anti-Christ, Hillary was the devil incarnate in a Prada pant-suit for the religious right.

Even though it is tempting to solely fault media’s anti-feminists and the right side of the country for my students’ reactions, such an easy solution to the “Hillary” burning-at-the-stakes leaves out the many liberally minded men and women who made sure that their voices against Clinton (or for Obama) would be heard. Oprah, for example, reversed her 2005 support for Hillary Clinton’s presidential campaign and endorsed Barack Obama in 2008.

A bit closer to home, one of my colleagues explained to me why she wouldn’t — just couldn’t — support Clinton. My colleague is one of the strongest and most vocal advocates of women’s rights. Women are the focus of her research; she makes sure that women are represented on committees; she is willing to volunteer to make sure that women’s rights, perspectives, and agendas are part of the agenda; she teaches on historical and current women’s issues. She is well-respected across campus, and she is well-known for her feminist research.

Her first comments can be summarized very briefly: “I just can’t see her as the President. She doesn’t have what it takes. And I am just worried that she’ll be too influenced by Bill. She couldn’t build coalitions because everybody would remember him.” Deep down, at the bottom of my conscious thinking, I too felt a faint flickering of doubt about Bill’s role in the White House. “The first gentleman” didn’t have a very convincing ring to it.

Similar to many of my women colleagues and students, I too was brought up in a traditional, male-dominated household, was for a long time a registered member of a Christian religion that strived on patriarchal hierarchies, and went to schools that re-enforced girls’ roles as caretakers and not scientists. And I chose to become an English professor, not an engineer, computer scientist, biologist, or other high-paying professional mostly associated with men’s prerogatives. Despite my consistent training in acceptable women’s roles, I try to listen to the voices of Naomi Wolf (1991), Judith Lorber (1994), Susan Faludi (1991), Gloria Anzaldúa (1999), Barbara Ehrenreich (2003), bell hooks (1984) and Betty Friedan (1986) who remind us of the long-standing gender discrimination in social, cultural, political, and workplace environments. They also show us our own contributions and our participation in a gendered and patriarchal community; they point out the exploitative practices of the advertising and fashion industry; they show us the importance of the Equal Rights Amendment; they address the backlash against feminists in the 80s;

and they point out the importance of understanding the connections between racism, sexism, and classism.

“We’ve Come a Long Way, Baby!” Have We?

When I reflected on students’ reactions to Clinton, I asked myself many times whether the anti-Clinton sentiments were based on long-held beliefs about women’s roles in a well-functioning patriarchal society. As a feminist scholar and teacher, I had read much about women’s fights for being acknowledged as thinking human beings, as deserving voting rights and equal rights, and for the right to decide over their own bodies. In my class readings, I include texts about the suffrage movement which gained strength with Elizabeth Cady Stanton and Susan B. Anthony. We talk about the 1848 Seneca Falls “Declaration of Sentiments” still resonates with many women’s rights activists. We read Anna Julia Cooper (1892), who reminds us of men who considered women as mere objects and play-things. She points to several male compatriots of her time: “Lessing declared that ‘the woman who thinks is like the man who puts on rouge — ridiculous;’ and Voltaire in his coarse, flippant way used to say, ‘Ideas are like beards — women and boys have none.’ Dr. Maginn remarked, ‘We like to hear a few words of sense from a woman sometimes, as we do from a parrot — they are so unexpected!’ and even the pious Fenelon taught that virgin delicacy is almost as incompatible with learning as with vice” (p. 64). She makes sure to discredit these opinions and to show why women should have a right to a higher education. We also engage in discussions about Charlotte Perkins Gilman (1898) who in *Women and Economics* pointed out women’s abilities to contribute equally to the economic well-being of the country. In addition, Betty Friedan encourages my students to explore women’s roles when, in *The Feminine Mystique* (1963), she addresses the question that she saw many women ask themselves: “Is this all?” Friedan, similar to late 19th century feminists, points to the implicit and explicit gender discrimination in industrialized nations that restricts women in their endeavors to participate in the political, social, and workplace communities. Later on, we read Barbara Ehrenreich (2003), who, in *Maid to Order*, continues the discussion of women’s role by focusing on the service industry, showing that women are overwhelmingly employed in underpaid service jobs.

The United States, and especially academia, has certainly progressed in its views on women. Students learn that women are no longer restricted by their virgin delicacy, and many are now part of the scholarly elite, full of ideas and always thinking. We can’t explain why girls avoid math and science after age 11, but it’s not because girls and women can’t think. When my students read that the Association for Women in Science (AWIS, 2009) believes that “women in STEM [science, technology, engineering, and mathematics] are prevented from reaching their full potential — not because they are less able or less willing — but because of barriers that exist in scientific workplaces.” (AWIS), they readily agree with AWIS’s conclusions. As AWIS points out, only eight percent of enrolled graduate students in engineering were women in 1966, which increased to 20 percent in 2001 (AWIS, 2009). Students were happy to read that, bolstered by the steadily — even though slowly — climbing numbers, women have continued to move into male-dominated professions because they are able and willing to work hard, take on intellec-

tual challenges, and show that they too make important contributions to politics, science, business, and industry. By 2008, women had become part of the political landscape in the United States, not only because Hillary Clinton ran for presidency, but because 24 percent of state legislators were women, and the country had elected eight women governors.

However, I also address in my classes that the steady increase of women in positions of authority does not preclude a continued attitude of condescension in higher education, politics, industry, and business. In 2005, Lawrence Summers (2005), president of Harvard University, let it be known at a Conference on “Diversifying the Science & Engineering Workforce” that the lower number of women in the sciences is due to “different availability of aptitude at the high end.” As he put it, “there are issues of intrinsic aptitude, and particularly of the variability of aptitude” (Summers, 2005, “Remarks”). Discrimination, he pointed out, is not likely since that would not be smart economically speaking. Socialization is also not a factor, since research has shown that it isn’t (Summers, 2005 “Remarks”).

Since “research,” not cited in Summers’s (2005) “Remarks,” has shown that socialization isn’t a factor, my students address the possibility of women’s inability to think at higher levels. Lessing and Voltaire, two of the 19th century men’s voices explaining women’s inferiority, seemed to have influenced Harvard’s former president, who did resign from his post, but who was given the Charles W. Eliot University Professorship at Harvard, with offices in the Kennedy School of Government and the Harvard Business School. And students also learn that he is currently the director of the White House National Economic Council, promoting tax cuts, but hopefully no longer promoting differential intrinsic aptitudes. Students have connected Summers’s (2005) comments with Richard Herrnstein and Charles Murray’s (1994) *Bell Curve*, in which the authors argue racial differences in intelligence persist (Herrnstein and Murray, 1994, chapters 13 and 14). Considering Barack Obama’s ethnic background, students have pointed out that such comments might not be wise.

Several of my students pointed out that the former Harvard President’s comments on women’s aptitude might not have been popular with a large majority of women and men, but they also acknowledge that we do continue to see women in positions of authority struggle to receive recognition. Even when women are recognized as capable, hard-working and intelligent, their career is often in jeopardy because of social and cultural stereotypes. When women run for political office, Kira Sanbonmatsu (2002) reminds students that gender plays a significant role in voters’ preferences. Women politicians were believed to be less qualified to deal with foreign affairs and the crime problem — “a stereotypically male issue” (p. 27) — but were seen as being better qualified to protect social security — “a stereotypically female issue” (p. 27). Clinton, in her campaign, encountered similar belief systems, being applauded for her health care reform but being lambasted for her stance on the war in Iraq. Furthermore, her intelligence and hard work as a lawyer, for example, were continuously undermined and promoted increased attacks on her character and on her ability to “integrate[...] her intelligence with her sexuality” (Paglia, 1996, p. 26).

What We Really Want: Women, War, and Peace

Despite my students' theoretical knowledge about women's positions in society, they continued to hold strong beliefs about women in positions of power. Their viewpoints were close to those explained by Deborah Rhode and Barbara Kellerman (2007) who point out that Clinton's run for presidency, and women's push into positions of authority, did not erase gender stereotypes. Their description of gender stereotyping in leadership roles is in close accordance with many of the experiences attributed to Clinton's campaign. As they put it,

men continue to be rated higher than women on most of the qualities associated with leadership. People more readily credit men with leadership ability and more readily accept men as leaders. What is assertive in a man can appear abrasive in a woman, and female leaders risk appearing too feminine or not feminine enough. On one hand, they may appear too "soft" — unable or unwilling to make the tough calls required in positions of greatest influence. On the other hand, those who mimic the "male model" are often viewed as strident and overly aggressive or ambitious. (p. 7).

My students were exposed to similar societal perspectives about women than I was and still am. In the political arena, many media outlets, many reporters, and many talk show hosts willfully forget that -- even though the Italian Prime Minister Silvio Berlusconi, in a 2009 comment, thinks so -- women are not "God's best gift to men," but that they participate in the intellectual, social, and political landscape of the country. Looking back, it is difficult to know whether Hillary Clinton's bid for presidency was undermined by the media's dislike of her husband or of her pantsuits. We will never know whether the country would not have been ready for a woman president, a sentiment that I heard many times during the democratic convention. "We are at war, you know," my women's studies colleague said. "I know," I responded, "but why would that disqualify Hillary Clinton?" "We need a strong leader to get us out of it," commented my colleague. "And it needs to be somebody who doesn't have the history the Clinton's have. Nobody will want to negotiate with her."

My colleague's comments reflected a common sentiment that was also explored in a 2004 article on gender beliefs and social relations. As Ridgeway and Correll (2004) point out in their work, "when hegemonic gender beliefs are effectively salient in a social relational context, they bias the extent to which a woman, compared to a similar man, asserts herself in the situation, the attention she receives, her influence, the quality of her performances, the way she is evaluated, and her own and others' inferences about her abilities at the tasks that are central to the context" (p. 519). Unfortunately, these sentiments about women's differential abilities — seen as a negative — also influenced the world in which my students lived. Even though Clinton was well-liked overseas, and even though women leaders around the world have successfully led their countries through peace, have avoided war through diplomacy and negotiation, and have also waged war as successfully and unsuccessfully as their male counterparts, my students remembered and were influenced by the media and also by historical depictions of women. They didn't

know that many other countries -- among them Sri Lanka, Israel, India, Great Britain, Portugal, Pakistan, Germany, Canada, Poland, Turkey, Ireland, New Zealand, and Panama — have had women prime ministers, chancellors, or presidents, and have often managed to promote a more positive image of their countries than other male-headed democracies.

I did have some advantages over my students in developing an appreciation for women's leadership. During my elementary to high school years in Austria, we heard much — and always wanted to know more — about one Austrian woman who caught our imagination not because she was the mother of Marie Antoinette, but because she married for love, had 16 children, instituted mandatory schooling, and ruled over an entire empire with what we considered “panache.” In other words, she was larger than life. Maria Theresa, empress of the Austro-Hungarian Empire for 40 years in the mid 18th century, is considered one of the most capable rulers in the long succession of Habsburg emperors. She initiated financial and educational reforms, increased the army by 200 percent, and fought Fredrick the Great of Prussia to regain the lands that had been taken from the Austro-Hungarian Empire. Several treaties ensured that land would change hands without further warfare. She established the first military academy as well as an academy of engineering science in 1754. She also insisted that the University of Vienna be given more money to fund the medical school.

Even though I have wondered whether K-12 education could incorporate a variety of accomplished and less-accomplished women leaders around the world, I don't blame them for neglecting to teach us about peace instead of war and to teach us about matriarchal systems instead of patriarchal systems. I am, however, convinced that a college and university education, which includes a liberal arts education, is responsible to teach students an appreciation of critical and analytical explorations that allow them to participate successfully in an ever-changing world. Because of this conviction, I wanted for students to look at different sources to increase their understanding of the complexity of gender roles in current U.S. politics. I wanted them to learn about Hillary Clinton's work not through her campaign promises, one-liners, and brief comments that were intended to get the attention of a crowd, but by reading various articles and books published by her or about her. Clinton's autobiography, which can easily be excerpted for students, provides a good starting point for moving away from media-dominated commentary that mostly excluded the work that Clinton considered important as a lawyer and politician.

Clinton's (2003) *Living History* showed her perspicacity and her ardent belief in the rights of children — and everybody — to healthcare, the rights of women to be treated as humans, and the rights of all to be active participants in a community, because, as she put it in a previous book (Clinton, 1996), “it takes a village.” Clinton provides a chronological history, including, among other things, her work with Marian Wright Edelman on school desegregation in the South in 1972. She explains very convincingly that women's rights are human rights; and she is very candid when she admits that her health care task force under Bill Clinton was not successful, even though she is glad that the task force tried to change current policies that leave millions of people un-insured.

What students found especially pertinent in her discussions is her acknowledgment of her role as a woman and as a professional. She outlines the paradox that she experienced over and over again:

It seemed that people could perceive me only as one thing or the other -- EITHER a professional woman OR a conscientious hostess. Gender stereotypes trap women by categorizing them in ways that don't reflect the true complexities of their lives. It was becoming clear to me that people who wanted me to fit into a certain box, traditionalist or feminist, would never be entirely satisfied with me as me -- which is to say, with my many different, and sometimes paradoxical roles.

In my own mind, I was traditional in some ways and not in others. I cared about the food I served our guests, and I also wanted to improve the delivery of health care for all Americans. To me, there was nothing incongruous about my interests and activities. (Clinton, 2003, pp. 140-141)

Clinton's (2003) comments reflect many of the discussions that professional women in all fields have to contend with on a regular basis. Women have to defend themselves for a wide range of reasons, including their choice of staying single, of not having children, or of juggling a family with their professional lives, of putting their children in childcare, of taking off from work to stay with their kids, or of requiring their partners and husbands to contribute in equal parts to the dreaded "H" word: household chores. Susan Faludi's (1991) book raised awareness of the contradicting positions that women have to juggle, being expected to perform traditional housework but also being expected to contribute to the economic well-being of the family (Faludi, 1991). Clinton's (2003) discussion of her diverse roles fits nicely into discussions of women's roles in leadership positions. As Rhode and Kellerman (2007) argue, "women are expected to be nurturing, not self-serving, and entrepreneurial behaviors viewed as appropriate in men are often viewed as distasteful in women" (p. 8).

Many of my students remembered Clinton's comment about "baking cookies" which brought a collective gasp to the nation. She refers to the incident in *Living History*:

A reporter asked whether I could have avoided an appearance of conflict of interest when my husband was Governor. I said, "You know, I suppose I could have stayed home and baked cookies and had teas, but what I decided to do was fulfill my profession, which I entered before my husband was in public life. And I have worked very hard to be as careful as possible."

I could have said, "Look, short of abandoning my law firm partnership and staying home, there was nothing more I could have done to avoid the appearance of a conflict of interest.

My aides suggested that I talk to reporters a second time. On the spot, I had a press conference. It had little effect. Thirteen minutes after I answered the question, a story ran on the AP wire. CNN quickly aired one too.

It turned into a story about my alleged callousness towards stay-at-home-mothers. Republicans labeled me the "ideological leader of a Clinton-Clinton Administration that would push a radical-feminist agenda. (Clinton, 2003, pp.109-110)

This comment about cookies and tea stayed in the American consciousness for many years and was also picked up by my students. Discussed and broadcast on March 26, 1992, on Ted Koppel's (1992) PBS *Frontline*, the infamous cookies came back to haunt her during the presidential campaign. Even though, as Jackie Judd on the show pointed out, Clinton "went on to say feminism means the right to choose work, or home, or both; the damage had been done. She'd been tagged an elitist and an ultra-feminist" (PBS, 1992, "Frontline"). Ruth Mandel, from Rutgers University, pointed out in the same show that the comments in the *New York Post* which called Hillary Clinton "a buffoon, an insult to most women," is "the old kind of feeling about 'uppity' women. Stay in your place. Here's someone who's stepping out of her place, here's someone ... you're able to describe with all the old stereotypes. ... If she's a woman, she's supposed to stand at his side, smile, look pretty, be quiet and say that everything he does is fine" (PBS, 1992, "Frontline"). In other words, it is the well-behaved women who should not be seen or be heardⁱⁱ.

What caught my students' attention about the *Frontline* interviews was the strong sense, from both political parties, that Hillary Clinton was a smart woman. It was an asset to some, and a threat to others. Ted Koppel, in his unfortunate way with words, perceives Clinton to be "a woman who is so smart and apparently independent in some strange way" (PBS, 1992, "Frontline"). Why Koppel called Clinton as "independent in some strange way" we will never know for sure. We do know, however, that her independence — and maybe her smartness — led to many conservative attacks when Bill Clinton ran for office in 1992. According to Lisa Burns (2008), Hillary Clinton was referred to as Lady Macbeth a number of times during that time (p. 142), evoking Shakespeare's story of Macbeth's wife who goads her husband to commit regicide so that he can become King and she can become Queen of Scotland.

Put Your Ear to the Pulse of the Time: Encouraging Critical Thinking

My students had read that women who are seen as threatening, as independent, as smart, or as non-conforming to current standards have been vilified for many centuries. Since popular culture no longer accepts to lock up women in the attic, or in a mental institution, strategies for painting them as unacceptable to society have changed. Media conglomerates, religious groups, and internet communities have taken on the role of judge and jury, and the U.S. public has taken on the role of silent bystanders who acquiesce to the sound-bites presented to us. Maybe we were Clinton supporters, but did she really need to make that comment about cookies and tea? Did she really have to be so abrasive? Couldn't she be a bit more emotional? Why didn't she hug babies on the campaign trail? She could have worn more feminine clothes instead of pant-suits. She could have styled her hair differently, worn her purse differently. She could have been more like Sarah Palin, who seemed to personify "true womanhood" and who was called the "present-day Esther" by

the religious right (Strang, 2008). She could have been “woman” as defined by a patriarchal system that we so ardently have fought against for decades.

“Remember Sarah Palin,” my friend said. “She was something! She was so pretty. She was so elegant. Her clothes, her hair, everything about her was just amazing.” He couldn’t explain why everything was so amazing about Palin, but he could tell me that Clinton was just the opposite. “I couldn’t vote for her. She is such a bully. She isn’t really a woman. She scares me!” I admitted to him that I was scared too, not by Clinton, but by people who thought that Palin personified womanhood, that she was what men — and many women — considered an asset to a political campaign. Did she bake cookies? Did she hug babies? Did she wear dresses? Was her hair all pretty and long? Did she play into our perceptions of a good woman? Certainly, the out-of-wedlock grandchild didn’t please the religious right even though they bravely stood by her side until the bitter end when McCain and Palin lost their bids for presidency and vice-presidency.

My friend isn’t particularly partisan, but he had listened to mostly mainstream news, had taken in information from talk shows on popular TV stations, and had discussed the campaign with his friends who too were getting their information from the same sources. He didn’t question the validity and objectivity of the news, nor did he question the underlying assumptions that influence the media and that also influence the viewer. It didn’t matter to my friend that Clinton could point to a successful public career. It didn’t matter that she fought for children’s healthcare, helped reform Arkansas’ education system, and advocated for women’s rights all over the nation and the world. It didn’t matter that Chelsea Clinton didn’t show any ill effects of growing up with a strong woman role model. Nor did my friend think twice about how the comments would be interpreted by his career-oriented wife whose baking skills scared her children and her husband. In principle, he did, as most men, “support gender equality — but in practice [he failed] to structure [his] life to promote it” (Rhode & Kellerman, 2007, p. 11).

Similarly, my students were ardent supporters of equal rights for women, but they were not practiced in connecting what they learned in the classroom to situations that exposed hidden assumptions and latent stereotypes. As teachers, we can encourage students to think critically about their own roles in perpetuating current value systems by challenging their assumptions about gender roles, race relations, sexual orientation, or class systems. In other words, we can encourage them to acknowledge and take responsibility for what they communicate and how they communicate it. As Gunther Kress (2005) points out in his discussion on new forms of texts, knowledge, and learning, such “agency of the individual who has a social history, a present social location, an understanding of the potentials of the resources for communication, and who acts transformationally on the resources environment and, thereby, on self are requirements of communication” (p. 20). With this agency then comes responsibility to pay attention to how texts, written or visual, are encoded and constructed, how these texts came into existence, and how the consumer and reader of these texts is manipulated in her/his decoding of the texts.

In addition to helping students understand the importance and impact of their individual agency, teachers need to encourage students to see themselves as members of various

discourse communities that influence their perceptions of the world around them. Such group membership influences students' social and cultural identities, which in turn shape how they interact with members of other groups. Stephen Kucer (2004) put it well when he points out that "the group attempts to socialize — directly or indirectly, consciously or unconsciously — the individual into thinking and behaving in particular ways that are appropriate to the group's view of itself and its relationship with the broader society" (p. 205). Our students, then, follow guidelines which "impact the individual's beliefs and behaviors, and they frame his or her interpretations of and interactions with others. The knowledge, values, and behaviors that an individual comes to reflect, therefore, are not simply the products of his or her own unique and independent psychological interactions with the world. They also are the products of interactions and experiences with the various significant social groups of which the individual is a member, as well as the groups' interactions and experiences with other groups in the world" (p. 205). If students and teachers understand the impact of group membership and social networks, we can learn to understand the implicit and explicit reactions to images of women in positions of power, news broadcasts, campaign advertising, or readings that undermine societal norms.

Teachers certainly need to be aware of the impact of their students' group membership and individual student agency; however, we also need to understand our own agency and our participation in groups and social networks. In other words, we need to challenge our own assumptions that we bring to the classroom. Our behaviors and literacy practices are part of a larger network which affects our social identity. We are also part of what James Gee calls "dominant discourse" (p. 31), which is "inherently ideological" (p. 30). To make explicit our group memberships and our memberships in various discourse communities can help us contextualize our reasons for using specific pedagogical tools, incorporating specific topics into our curriculum, and encouraging agency, community outreach, or service learning.

If we believe, with Stephen Kucer (2004), that "by our very nature, we are social beings," and that we participate in community building, we are responsible for teaching students how to participate successfully and constructively in these communities. As The New London Group (1996) points out, the fundamental purpose of education is to "ensure that all students benefit from learning in ways that allow them to participate fully in public, community, and economic life" (np). This requires, then, that our pedagogy include a "teaching and learning relationship that creates the potential for building learning conditions leading to full and equitable social participation" (np). To create such environments, it is necessary to encourage students to question established social narratives such as gendered narratives and to participate in rewriting these narratives to show the shifting nature of our civic lives, incorporating what The New London Group calls "civic pluralism." Such pluralism creates spaces "where differences are actively recognized; where these differences are negotiated in such a way that they complement each other; and where people have the chance to expand their cultural and linguistic repertoires so that they can access a broader range of cultural and institutional resources" (np). Creating these spaces is the responsibility of an inclusive liberal arts education to which students in colleges and universities are entitled. To be successful in this endeavor means to incorporate learning experiences that allows students to be critical and analytical participants in their

varied discourse communities, that encourages them to re-evaluate unexamined beliefs, and that promotes social and cultural identity development that encourages openness and acceptance of difference.

Moving On: We've Got a Long Ways to Go!

Newspapers, magazines, and talk shows vilified Hillary Clinton's character during Bill Clinton's years in the White House and throughout her run for presidency. David Rothkopf (2009), from the *Washington Post*, tells us that Hillary Clinton "has drawn more attention for her moods, looks, outtakes and (of course) relationship with her husband than for, well, her work revamping the nation's foreign policy" (Rothkopf, 2009). Her handbag and scarf choices, and her weight and hair, he points out, have drawn more attention even from self-proclaimed Clinton supporters than her work on foreign politics. He calls reporters from the *Washington Post* to task after they "mused about whether a brew called Mad Bitch would be the beer of choice for the secretary of state" (Rothkopf, 2009). Hillary Clinton, more than 250 years after Empress Maria Theresa ruled over an empire "where the sun never set," more than a 100 years after the Seneca Falls Declaration, close to a 100 years after women received the right to vote, and in an age when the Equal Rights Amendment has not been ratified by all states, can still say with Anna Julia Cooper (1892): "the chance of the seedling and of the animalcule is all I ask — the chance for growth and self development, the permission to be true to the aspirations of my soul without incurring the blight of your censure and ridicule" (Cooper, 1892, p. 66).

References

- Allen-Mills, T. (2008, January 20). Women turn on 'traitor' Oprah Winfrey for backing Barack Obama. *The Sunday Times*. Retrieved from http://www.timesonline.co.uk/tol/news/world/us_and_americas/us_elections/article3216586.ece
- Anzaldúa, G. (1999). La Conciencia de la Mestiza: Toward a new consciousness. In *Borderlands/La frontera* (pp. 99-120). San Francisco : Aunt Lute Books.
- AWIS (Association of Women in the Sciences). (2009). Public policy statement. Retrieved from <http://www.awis.org/displaycommon.cfm?an=1&subarticlenbr=195>
- Bitzer, L. (1968). "The rhetorical situation." *Philosophy and Rhetoric*, (1)1, 1-14.
- Burns, L. M. (2008). *First Ladies and the fourth estate: Press framing of presidential wives*. DeKalb, Illinois: Northern Illinois University Press.
- Castells, M. (1997). *The power of identity*. Malden, MA: Blackwell
- Clinton, H. R. (1996). *It takes a village: And other lessons children teach us*. Simon and Schuster.
- Clinton, H. R. (2003). *Living history*. Simon and Schuster.
- Cooper, A. J. (1892). *A Voice from the South*. Xenia, OH: The Aldine Printing House.
- Cover Photo. (1993, February) Hillary Clinton. *Spy Magazine*.
- Dewey, J. (1938). *Experience and education*. (New York, Collier Books).

- Ehrenreich, B. (2003). Maid to order. In *Global woman: nannies, maids, and sex workers in the new economy* (pp. 85-103). Eds. B. Ehrenreich and A. R. Hochschild. New York: Metropolitan Books.
- Faludi, S. (1991). *Backlash: The undeclared war against American women*. New York: Crown.
- Freire, P. (1968). *Pedagogy of the oppressed*. New York: The Seabury Press.
- Freire, P., & Macedo, D. (1987). *Literacy: Reading the word and the world*. South Hadley, MA: Bergin and Garvey Publishers.
- Friedan, B. (1963). *The feminine mystique*. New York: Dell.
- Gee, J. P. (1987). What is literacy. *Teaching and Learning* (2), 3-11.
- Gilman, C. P. (1998). *Women and Economics: A Study of the Economic Relation Between Men and Women as a Factor in Social Evolution*. Boston: Small, Maynard & Co.
- Giroux, H. A. (1992). *Border crossings: Cultural workers and the politics of education*. New York: Routledge.
- Gray, J. (1992) *Men are from Mars, women are from Venus*. Harper Collins.
- Herrnstein, R. J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life*. Free Press.
- hooks, b. (1984). *Feminist theory: From margin to center*. Boston: South End.
- Koch, J. W. (2000). Do citizens apply gender stereotypes to infer candidates' ideological orientations? *The Journal of Politics*, (62)2, 414-429.
- Kress, G. (2005). Gains and losses: New forms of texts, knowledge, and learning. *Computers and Composition* (22), 5-22
- Kucer, S. B. (2004). *Dimensions of literacy: A conceptual base for teaching reading and writing in school settings*. New Jersey: Routledge.
- Leip, D. (2009). Atlas of U.S. presidential general elections. Retrieved from <http://uselectionatlas.org/RESULTS/>
- Lorber, J. (1994). *Paradoxes of gender*. New Haven, CT: Yale University Press.
- Malkin, M. (2007, October 29). The frightful specter of Hillary Clinton. Retrieved from <http://michellemalkin.com/2007/10/29/the-frightful-specter-of-hillary-clinton/>
- Mandel, R. B. (2007). She's the candidate!: A woman for president. In *Women and leadership: The state of play and strategies for change* (pp. 283-307). Eds. B. Kellerman and D. L. Rhode. San Francisco: Jossey Bass.
- Obama, B. (2004). *Dreams from my father: A story of race and inheritance*. Three Rivers Press.
- Obama, B. (2008). *The Audacity of hope: Thoughts on reclaiming the American Dream*. Vintage.
- Porter, J. (1986) "Intertextuality and the discourse community." *Rhetoric Review* 5: 34-47.
- Paglia, C. (1996, March 4). Ice queen, drag queen. *The New Republic*, 24-26.
- PBS. (1992 March 26). "Frontline: Making Hillary Clinton an issue." Retrieved from <http://www.pbs.org/wgbh/pages/frontline/shows/clinton/etc/03261992.html>
- Proudford, K. L. Isn't she delightful?: Creating relationships that get women to the top (and keep them there). In *Women and leadership: The state of play and strategies for change* (pp. 431-451). Eds. B. Kellerman and D. L. Rhode. San Francisco: Jossey Bass.

- Rhode, D. L., & Kellerman, B. (2007). Women and leadership: The state of play. In *Women and leadership: The state of play and strategies for change* (pp. 1-62). Eds. B. Kellerman & D. L. Rhode. San Francisco: Jossey Bass.
- Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations." *Gender and Society*, (18)4, 510-531.
- Rothkopf, D. (2009, August 23). It's 3 a.m. Do you know where Hillary Clinton is? *The Washington Post*. Retrieved from <http://www.washingtonpost.com/wpdyn/content/article/2009/08/21/AR2009082101772.html>
- Sanbonmatsu, K. (2002). Gender Stereotypes and Vote Choice Author(s). *American Journal of Political Science* (46)1, 20-34.
- Schlafly, P. (2008, June 23,). Hillary Clinton shouldn't blame sexism for her loss. Town-hall.com. Retrieved from http://townhall.com/columnists/PhyllisSchlafly/2008/06/23/hillary_clinton_shouldnt_blame_sexism_for_her_loss?page=1
- Shapiro, B. (2007). What goes around comes around, Hillary. Creators.com. Retrieved from <http://www.creators.com/opinion/ben-shapiro/what-goes-around-comes-around-hillary.html>
- Strang, S. (2008, October 2). Prophecy for Sarah Palin." *Strang Report*. Retrieved from <http://www.strangreport.com/2008/10/prophecy-for-sarah-palin.html>
- Summers, L. (2005, January 14,). Remarks at NBER conference on diversifying the science & engineering workforce. Retrieved from <http://web.archive.org/web/20080130023006/http://www.president.harvard.edu/speeches/2005/nber.html>
- Tannen, D. (1990). *You just don't understand: Women and men in conversation*. William Morrow.
- The New London Group (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review* (66)1, np. Retrieved from http://wwwstatic.kern.org/filer/blogWrite44ManilaWebsite/paul/articles/A_Pedagogy_of_Multiliteracies_Designing_Social_Futures.htm
- Ulrich, L. T. (2007). *Well-Behaved women seldom make history*. Alfred A. Knopf
- Wolf, N. (1991). *The beauty myth: How images of beauty are used against women*. New York: Doubleday.

ⁱ Even though Hillary Clinton was the first woman who was a serious contender for presidency, several women, such as Victoria Woodhall in 1872, Belva Lockwood in 1884 and 1888, and Shirley Chisholm in 1972, have run for presidency in the United States. (See Mandel, 2007).

ⁱⁱ Historian Laurel Thatcher Ulrich (2007), pointed out that “well-behaved women seldom make history,” a phrase that has made it onto many bumper stickers and has led to much discussion among women and men.

The Use of a Checklist and Qualitative Notebooks for an Interactive Process of Teaching and Learning Qualitative Research

Rebecca K. Frels^{1a}, Bipin Sharma^b, Anthony J. Onwuegbuzie^c,
Nancy L. Leech^d, Marcella D. Stark^c

^aLamar University, Beaumont, Texas 77710

^bSaint Xavier University, Chicago, IL 60655

^cSam Houston State University, Huntsville, Texas 77341

^dUniversity of Colorado Denver, Denver, Colorado 80217

Abstract

From the perspective of doctoral students and instructors, we explain a developmental, interactive process based upon the Checklist for Qualitative Data Collection, Data Analysis, and Data Interpretation (Onwuegbuzie, 2010) for students' writing assignments regarding: (a) the application of conceptual knowledge for collecting, analyzing, and interpreting qualitative data; (b) utilizing detailed instructor feedback of content and writing style as a positive catalyst for growth; and (c) integrating feedback in future assignments and reflecting on the process. We advocate the cyclical use of this framework for teaching and learning rigorous qualitative research.

Keywords: Writing, writing rubric, qualitative research, steps in qualitative research process.

Graduate students enrolled in qualitative research courses often undertake multiple daunting tasks in order to understand and to conduct rigorous qualitative research. These tasks include learning: (a) the history and current state of qualitative inquiry, (b) numerous qualitative research designs, and (c) methods of analyzing and interpreting qualitative data. A few common textbooks offer traditions (e.g., phenomenological research, grounded theory, ethnography) and methods for conducting rigorous qualitative studies (cf. Chenail, 2007; Denzin & Lincoln, 2005; Hurworth, 2008; Miles & Huberman, 1994). However, to learn how to conduct rigorous qualitative studies, more than textbook information is necessary. Moving from reading theory in the texts to applying the concepts through practice involves an application of concepts that is often reliant upon student writing and instructor feedback.

In order for any research study to be shared with others, with some exceptions (e.g., performance ethnography, visual anthropology), the study results are in written form. In-

¹ Corresponding author's email: rebecca.frels@gmail.com

deed, writing well is a mainstay for productive scholarship for students and academics alike, and the phrase *publish or perish* might be all too familiar to even prolific writers. According to Boote and Beile (2005), “acquiring the skills and knowledge required to be education scholars should be the focal, integrative activity of predissertation doctoral education. Preparing students to analyze and synthesize research in a field of specialization is crucial to understanding educational ideas” (p. 3). Thus, in this article, to assist researchers in their ability to write qualitative research, doctoral students and instructors describe the interactive process of *Qualitative Notebooks* (Onwuegbuzie et al., 2009) and the *Checklist for Data Collection, Data Analysis, and Data Interpretation*, developed by Onwuegbuzie (2010), hereafter called the Checklist. This instrument, which facilitates the development of becoming a prolific qualitative researcher, is used with a writing component in qualitative research coursework. Even though the Checklist was created for the development of students as qualitative researchers, we believe that the Checklist is a valuable tool to confirm the essential elements of a qualitative study for emergent scholars and beyond. To evidence the developmental, interactive process of the Checklist as an integral writing component for rigorous qualitative research and to evidence the interactive process of the instructor and student(s) through the Checklist and the *Qualitative Notebook(s)*, we present following sections: (a) Theoretical Framework; (b) Methodological Framework; (c) Model for Teaching and Learning Qualitative Research, (d) The Qualitative Notebook; (e) Checklist for Data Collection, Data Analysis and Data Interpretation; (f) APA Style: Part II of the Checklist; (g) The Interactive Writing and Feedback Process; (h) The Reflexive Journal; (i) Reflections on the Process, and (j) Implications.

Theoretical Framework

According to Vygotsky (1978), learning encompasses a scaffolding effect through the apprenticeship process. Hence, Vygotsky’s (1978) theory of social development underscores the developmental feedback cycle associated with the interaction between the professor(s) and student(s) and the use of the Checklist. As such, the process of learning qualitative inquiry is an interactive process whereby instructors interact with students in both verbal and written format, stressing each important stage of student development and students’ belief systems regarding their qualitative research.

Methodological Framework

In addition to the theoretical research framework, Leech and Onwuegbuzie’s (2010) interactive, iterative, recursive, emerging, and continuous 13-step process for qualitative research was used as the methodological framework for teaching and learning qualitative research: (a) Step 1: Determine the goal of the study, (b) Step 2: Formulate the research objective(s), (c) Step 3: Determine the rationale of study, (d) Step 4: Determine the research purpose, (e) Step 5: Determine the research question(s), (f) Step 6: Select the qualitative sampling framework, (g) Step 7: Select the qualitative research design, (h) Step 8: Collect data, (i) Step 9: Analyze data, (j) Step 10: Legitimate data, (k) Step 11: Interpret data, (l) Step 12: Write the qualitative research report, and (m) Step 13: Reformulate the research question(s). As such, students use the methodological framework as a structural component when designing and undertaking qualitative research studies.

Model for Teaching and Learning Qualitative Research

The model for teaching and learning qualitative research (Onwuegbuzie et al., 2009) allows students to progress through four major phases of learning and practice. The first phase, *the conceptual/theoretical phase*, is an introduction to the qualitative research process. In this phase, students explore the history of qualitative research, as they also recognize the first five steps (Leech & Onwuegbuzie, 2010), which are involved in research formulation, specifically: (a) Step 1 (determine the goal), (b) Step 2 (formulate the research objective), (c) Step 3 (determine the rationale), (d) Step 4 (determine the research purpose), and (e) Step 5 (determine the research question).

In the second phase of the course, *the technical phase*, instructors describe 18 qualitative analysis techniques (i.e., classical content analysis, constant comparison analysis, and discourse analysis) using qualitative data analysis software (NVivo 8; QSR International Pty Ltd., 2008). In addition, students compose a research plan (i.e., Step 6: select the sampling framework and Step 7: select the research design). Also, research implementation (i.e., Step 8: collect data, Step 9: analyze data, Step 10: legitimate data, and Step 11: interpret data) and disseminating results/suggesting future research (i.e., Step 12: write the research report and Step 13: reformulate research questions) frame the research process for students as they use the Checklist for writing research reports. The interactive process of teaching and learning culminates during the third phase of the course, *the applied phase*, whereby instructors work closely with students in collecting, analyzing, interpreting, and writing their respective qualitative research assignments through the interactive feedback process. Phase 4, the *emergent scholar phase*, is an extension of the third phase and occurs at the conclusion of the course. In this phase and beyond, instructors encourage students to present collaborative research and submit post-course manuscripts to journals for consideration for publication. Furthermore, as a framework for future qualitative studies, students are able to continue the use of the Checklist to guide them in data collection, data analysis, and data interpretation in conjunction with the 13-step process for qualitative research.

Thus, the course phases are distinct, overlapping, and iterative. Students progress in their qualitative research knowledge and writing proficiency in Phase 2: the *technical phase*. In addition to learning 18 qualitative analysis techniques (Phase 2), students apply their knowledge and write six qualitative analysis exemplar notebooks (i.e., assignments) toward becoming emergent scholars (Phase 4). With this in mind, the writing component of the course is structured so that students: (a) author qualitative notebooks using the Checklist, (b) receive detailed instructor feedback via the Checklist and accept feedback as helpful toward setting goals, and (c) integrate feedback in future qualitative notebook assignments and reflect upon the process. The following section, *The Qualitative Notebook*, explains how students build on the theoretical and conceptual knowledge of Phase 1 of the qualitative research course through the practical application of conducting research and writing research reports.

The Qualitative Notebook

With respect to the assignment aspect of a course, there is a distinct difference between authentic assessments and performance assessments of coursework, with the former involving the application of knowledge in an authentic setting (Linn & Gronlund, 1999). Furthermore, in authentic assessments, authenticity is required, as opposed to performance assessments whereby authenticity is only approximated (Linn & Gronlund, 1999). It is important to note that in order for students to engage in authentic assessments, they must undertake a practical application of concepts learned in coursework. Onwuegbuzie and Leech (2003) described the use of notebooks and detailed scoring checklists (e.g., scoring rubrics) to encourage strongly the development of students' practical skills. Thus, in Phase 3 of the course (the *applied phase*), students are asked to become researchers.

The qualitative notebook (e.g., authentic assessment) is one of the primary activities within the course for students to experience conducting qualitative research. The notebook assignment represents a series of assessments whereby students are asked to collect, to analyze, and to interpret data, and ultimately to write up formally the findings and interpretations in the same manner as would appear in a published journal article. In fact, the term *notebook* represents the idea of compiling each assignment that contains detailed feedback from instructors into a portfolio (i.e., notebook). Thus, students refer to their knowledge gained in Step 1 through Step 5 for formulating their research, and move into Step 6 (i.e., select sampling framework) and Step 7 (i.e., select research design) as they compose the method sections of their research studies to be presented through the notebook assignments. It is at this point that students use the Checklist to understand the necessary components regarding data collection, data analysis, and data interpretation to include when writing their notebooks. Figure 1 depicts the Checklist for use within the 13-step methodological framework (Leech & Onwuegbuzie, 2010), used in the structure of the course with the four-phase model for teaching and learning qualitative research (Onwuegbuzie et al., 2009). As seen in Figure 1, the four-phase model allows students to bridge the conceptual and theoretical components (e.g., the 13-step methodological framework) of qualitative research into the writing process. In addition, depicted in Figure 1, students refer to specific steps of the 13-step qualitative research process at different times of the course. For example, students refer to Step 8 and Step 9 (research implementation) in the Results section, and Step 12 and Step 13 (disseminate results/suggest future research) in the Discussion section. As presented in this figure, the Checklist is introduced in Phase 2 (i.e., the *technical phase*).

In addition, students use software (NVivo 8; QSR International Pty Ltd., 2008) to analyze data extracted from interviews, member checking interviews, and debriefing interviews for a case study for six assigned notebooks: (a) word count/keywords-in-context; (b) classical content analysis; (c) method of constant comparison; (d) ethnographic analysis (i.e., domain analysis, taxonomic analysis, componential analysis); (e) discourse analysis; and (f) cross-case displays: exploring and describing/ordering and explaining. Specifically, students use the Checklist and detailed feedback from instructors to help guide their subsequent qualitative notebook write-ups and, as a result, the quality of the write-ups potentially improves for students with each subsequent qualitative notebook report, until each

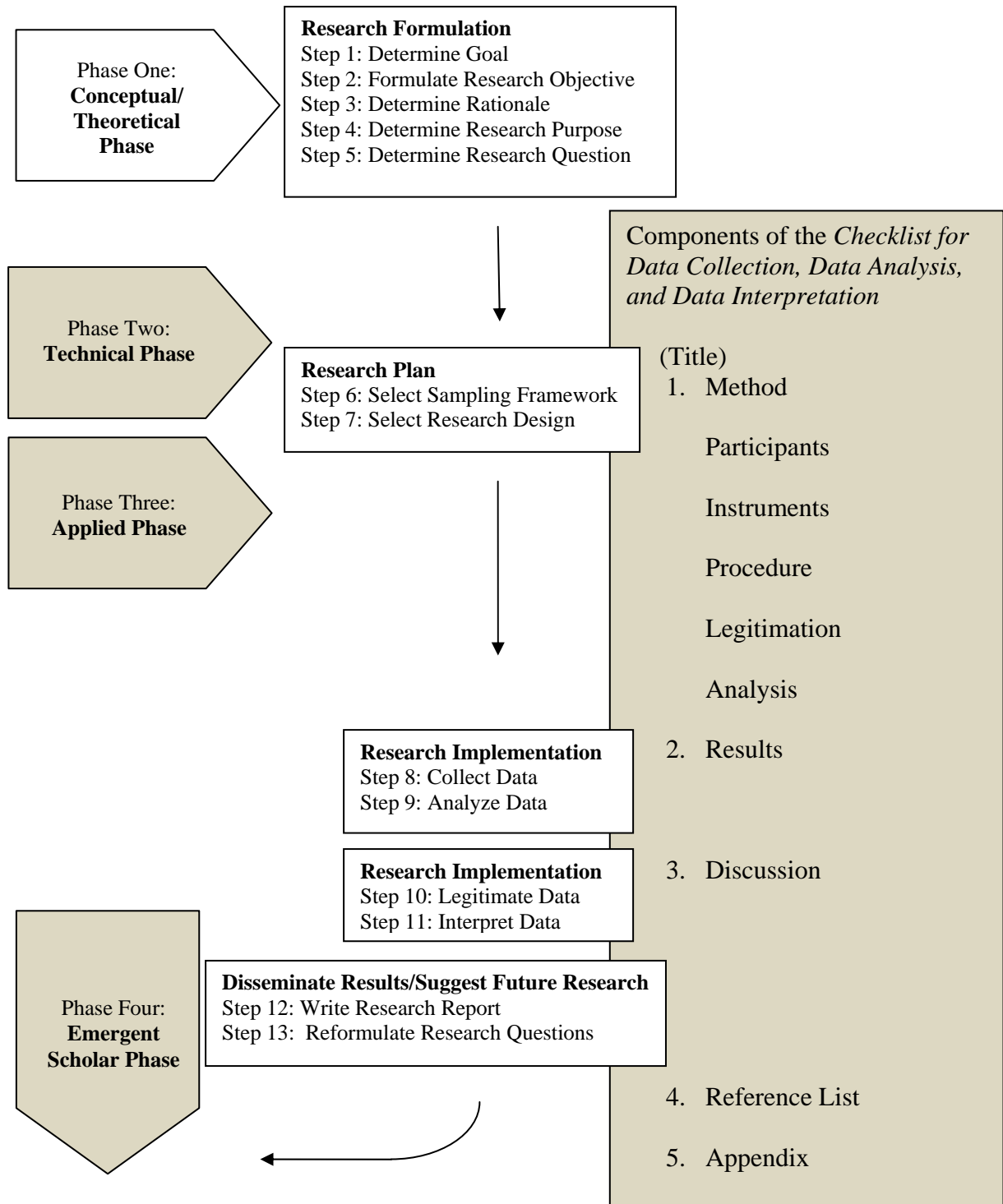


Figure 1. Integration of the four-phase model, the checklist, and the 13-step methodological framework with respect to writing a research report.

respective notebook reaches maximum quality. In the following section, we describe how the Checklist is used to facilitate the interactive process between instructors and students for composing notebook assignments.

Checklist for Data Collection, Data Analysis, and Data Integration

Students compose respective qualitative notebooks according to two sections of the Checklist: (a) content (Part I), the rubric for instructors for feedback pertaining to the essential components of qualitative research; and (b) style (Part II), the rubric for feedback pertaining to adherence to American Psychological Association (APA, 2010) guidelines. Specifically, Part I contains 158 items with a Likert-format scale format for each item ranging from 1 to 5 (1 representing strongly disagree to 5 representing strongly agree). Likewise, Part II (i.e., writing style) contains 70 items. For Part II, as a guide, students are given an evidence-based article wherein the 60 most common APA errors are identified (see Onwuegbuzie, Combs, Slate, & Frels, 2010). Both summative and formative feedback are given with the Checklist. Scores from both rubrics (i.e., content and style) are converted into percentages for a final score and *summative* feedback: 60% of the final score is for content (Part I) and 40% of the final score is for writing style (Part II). Thus, each qualitative notebook receives a score on a 100-point scale. Moreover, the tracking feature of the Word processing software program is used to provide *formative* feedback in conjunction with the Checklist. Formative feedback allows students to take remedial measures where necessary and for instructors to reinforce positive behavior, as waiting until the end of a course does not improve skills within the same course (Clarke, 1985). Hence, students are very aware of the expectations for a final assignment in the course and the various components and skills that are essential for rigorous research. When a student uses Part I as a guide for writing an exemplar notebook and discovers that he or she has neglected a critical element for presenting research, the student then seeks out through reference books ways to address essential components for reporting research findings. Part I of the Checklist pertains to 10 essential sections of a research report: (a) title, (b) method, (c) instruments, (d) procedure, (e) analysis, (f) legitimation, (g) results, (h) discussion, (i) reference list, and (j) appendix. Appendix A² presents the Checklist Part I that lists each of the 158 items included in the 10 essential sections. It should be noted that this Checklist is continually revised and updated as new qualitative concepts, theories, procedures, and language emerge. Each of the essential sections is described in detail.

Title

According to APA (2010) style guidelines, a title should be “fully explanatory when standing alone” (p. 23) and summarize the main idea of a manuscript. The title section of Part I includes five pertinent points for students to consider when composing a title. With this in mind, specific components of the title section include directives to: (a) make clear the population/context/case(s) of interest; (b) make clear the primary independent variable(s), if applicable; (c) make clear the dependent variable, if applicable; (d) indicate

²Appendix A is posted online at http://www.uncw.edu/cte/et/articles/Vol11_1/FrelsAppA.pdf.

the specific relationship between the major variables; and (e) avoid vague, ambiguous, and emotional-laden terms. Thus, the title of a qualitative study, with regard to the five elements aforementioned, would depend on whether the qualitative inquiry is case-oriented, variable-oriented, or process/experience-oriented (Onwuegbuzie, Slate, Leech, & Collins, 2009).

Method

The method section of qualitative research involves Step 6 (select the sampling framework) and Step 7 (select the research design; Leech & Onwuegbuzie, 2010). As such, the method section should be detailed in explanation whereby researchers emphasize an experience that is transformed into words for understanding “*naturally occurring, ordinary events* in natural settings, so that we have a strong handle on what ‘real life’ is like” (Miles & Huberman, 1994, p. 10, emphasis in original). Critical elements of qualitative research regarding the method section of Part I include: (a) participants, (b) instruments, (c) procedure, (d) legitimation, and (e) analysis. Each of these is described in detail.

Participants. Sampling is an essential step of qualitative research, taking into account both: (a) the sampling scheme (i.e., the specific technique utilized to select participants); and (b) the sampling design (i.e., the framework within which the sampling occurs, comprising the number and types of sampling schemes and the sample size; Onwuegbuzie & Leech, 2007a). Further, Onwuegbuzie and Leech (2007b) described the use of *qualitative power analysis* to represent “the ability or capacity to perform or act effectively with respect to sample” (p. 117). With regard to participants, qualitative power analysis assesses the appropriateness of units in a sample (Onwuegbuzie & Leech, 2007b). Additionally, Onwuegbuzie and Leech (2005) affirmed that qualitative researchers should make sampling decisions regarding the number of interviews, observations, focus groups, and length of interviews based upon the goal of attaining prolonged engagements, persistent observations, and adequate reflection (i.e., reflexivity). The participants section of Part I includes the aforementioned components regarding sampling and 16 major points pertaining to participants and the role of the researcher. Hence, students who thoroughly address each component of the method section should be confident that a study is well described for an audience.

Instruments. Although researchers are the primary instrument in qualitative studies (Lincoln & Guba, 1985; Paisley & Reeves, 2001), most qualitative research studies involve the utilization of other instruments such as interview schedules, focus group schedules, and observational protocol. As recommended by Onwuegbuzie and Leech (2007a), a researcher should leave an audit trail by documenting every step of the research process, including activities, interviews, member-checks, and analysis of data. By employing the instrument section of Part I as a guide, students address 28 areas important for describing instruments in qualitative research. Further, students are requested to provide citations for all statements pertaining to the characteristics of the instruments. Therefore, students learn important qualitative concepts such as non-verbal nuances (Fontana & Frey, 2005) regarding qualitative interviews, specifically: (a) *proxemics*, the use of interpersonal space to communicate ideas; (b) *chronemics*, the way speech and silence is con-

veyed through conversation; (c) *kinesics*, body movements or postures; and (d) *paralinguistics*, the variations in volume, pitch, and quality of voice.

Procedure. The compilation of research records should entail a complete ethnographic record, as suggested by Spradley (1980), to include all field notes, artifacts, and any other documentation relevant for understanding a qualitative research study. Furthermore, this section assists students to understand the importance of providing evidence for rich data, and systematic collection of data. Included in the 27 items of the procedure section is the task for students to identify at least one verification procedure in detail (e.g., prolonged engagement, persistent observation, triangulation, contextualization of observations, method of constant comparison, and examining extreme cases).

Analysis. The analysis section (Step 9; Leech & Onwuegbuzie, 2010) of qualitative research involves the idea that using different qualitative data analysis techniques can increase triangulation; thus, researchers should systematically select multiple appropriate analysis techniques (Leech & Onwuegbuzie, 2008). Miles and Huberman (1994) contended that strengths of qualitative data depend upon their “*richness and holism*, with strong potential for revealing complexity; such data provide ‘thick descriptions’ that are vivid, nested in a real context, and have a ring of truth that has strong impact on the reader” (p. 10, emphasis in original). Hence, the analysis section of the Checklist comprises four general categories of analyses as noted by Leech and Onwuegbuzie (2010): (a) inductive coding (i.e., going to the text, coding inductively for meaning, developing categories from codes, producing theme statements); (b) deductive coding (i.e., coding deductively for meaning, going to the text, developing categories from codes, producing theme statements); (c) abductive coding (i.e., coming from an interactive process of deduction and induction; and (d) interpretive coding (i.e., developing a more abstract interpretation). As such, qualitative data analysis consists of three concurrent activities: data reduction, data display, and conclusion drawing/verification (Miles & Huberman, 1994).

Students are guided to make pre-analysis considerations important for addressing legitimation to include prolonged engagement, persistent observation, triangulation, leaving an audit trail, member checking, using extreme cases, replicating a finding, and referential adequacy (Leech & Onwuegbuzie, 2010). Importantly, and noted in the Checklist, students are asked to justify categories that emerge, and at which point (i.e., a priori, a posteriori, or iterative) these categories were specified (Onwuegbuzie, 2003). Furthermore, students seek to understand the difference between exploratory or confirmatory techniques, the importance of naming sources used to identify categories, and ways to justify the existence of a given set of categories (i.e., external, rational, referential, empirical, technical, or participative; Conastas, 1992).

Legitimation. Denzin and Lincoln (2005) attributed three crises (representation, legitimation, and praxis) as confronting researchers regarding the evaluation of qualitative research and posed “a serious rethinking of such terms as *validity*, *generalization*, and *reliability*” (p. 19; emphasis in original). Threats to internal and external credibility occur at three major stages of the research process, namely the research design/data collection stage, the data analysis stage, and the data interpretation stage (Onwuegbuzie & Leech,

2007a). Based on Onwuegbuzie and Leech's (2007a) framework, the legitimization section of the Checklist assists students in addressing threats to internal credibility and external credibility in an iterative fashion. Using the Checklist, students detail, describe, and provide the citations for all important threats to legitimization and verification procedures. The legitimization section of Part I includes references to guide students through potential threats to credibility (e.g., Creswell, 2007; Guba & Lincoln, 2005; Lather, 1991; Lincoln & Guba, 1985; Miles & Huberman, 1994).

Authenticity criteria (Guba & Lincoln, 2005) embody constructivist assumptions for five elements that help to expand understanding and increase legitimation: (a) fairness: the researcher's ability to value and honor the evaluation process; (b) ontological authenticity: the criteria for assessing a high level of awareness among participants in research; (c) educative authenticity: the extent to which participants understand and appreciate diverse value systems of others; (d) catalytic authenticity: the appreciations and constructions that lead to actions or decisions by participants; and (e) tactical authenticity: the empowerment on participants and stakeholders to act on increased understanding that results from a study. As posited by Onwuegbuzie, Leech, and Collins (2008), the ability to discuss thoughts, perceptions, feelings, and experiences regarding authenticity and reflexivity helps researchers move deeper into the investigation and captures participants' voices and empowers them to a greater extent.

Results

The results section pertaining to Part I comprises Step 8 (collect data) and Step 9 (analyze data), and as noted by Leech and Onwuegbuzie (2010), the results section includes the ethical nature of data collection, research paradigm, and philosophical correlates of the research paradigm. Qualitative research has been described as rich in multiple meanings (Onwuegbuzie & Leech, 2007a), and also maintains a communitarian view of power, as described by Christians (2005), as being intimate and reciprocal. The results section of qualitative research involves interpretive validity, or the extent to which the interpretation of the analysis represented an understanding of the phenomenon (Maxwell, 1992), through thick and rich descriptions using original language from the participants for each theme and category. Writing the qualitative research report involves aspects such as the clear description of themes, appropriate displays of meanings of themes, and presenting thick, rich data (Onwuegbuzie & Leech, 2010). Threats to verification, trustworthiness, internal credibility, and authenticity are addressed through some of the relevant queries as outlined by Miles and Huberman (1994): (a) How context-rich, meaningful, and thick are descriptions from text? and (b) Are the presented data linked to the emerging theory? The concept of truth space (the sample of words portrays the experience, the feelings, the opinions, the sentiments; Onwuegbuzie, 2003) should be regarded in the results of a study whereby "qualitative researchers hope that the sample of words is representative" (Onwuegbuzie, 2003, p. 400). Hence, students address components throughout the results section, as they also strive to integrate data and avoid vague, ambiguous, and emotional-laden terms and represent the phenomenon studied.

Discussion

According to Leech and Onwuegbuzie (2010), steps of the Discussion section comprise the legitimation of data (Step 10) and the interpretation of data (Step 11), and conclude with a written report (Step 12), written in a manner acceptable to the intended audience (i.e., faculty, journal reviewers, policy makers, practicing educators in the field, conference paper reviewers, researchers). With respect to each tradition of inquiry (e.g., biography, phenomenological, grounded theory, ethnography, case study), two rhetorical structures are addressed: (a) the overall structure, or the overall organization of the study; and (b) the embedded structure, or the specific narrative devices and techniques used by a writer (Creswell, 2007). Furthermore, the discussion section allows students to interpret findings and reference these findings back to research questions. As a result, the discussion section of the Checklist also allows researchers to reevaluate research questions, and if necessary, to reformulate research questions (Step 13) as a result of data interpretations (Leech & Onwuegbuzie, 2010). The Checklist further presents safeguards for students to understand personal bias, generalizations, and implications.

Reference List and Appendix

The final two sections of Part I of the Checklist, namely, the reference list and appendix, direct students to attend to important features such as accuracy of citations (e.g., citations that are provided in the text are also contained in the reference list), and accuracy of APA (2010) style guidelines when referencing authors. Other items in this section include: (a) names of all authors are accurate and consistent, and (b) sources are written accurately. The appendix section of the Checklist refers to eight critical elements for an appendix, including appropriate qualitative software output, informed consent documentation, and samples of any instruments developed or adapted by the researcher.

APA Style: Part II of the Checklist

Chapter 1 of the Publication Manual of the APA (2010) pertains to writing for the behavioral and social sciences, and describes several considerations for authors, specifically regarding their own research and the scientific publishing tradition. According to Henson (2007), more than 60% of educational journals requested that authors adhered to APA (2010) style guidelines. Also, Onwuegbuzie and Combs (2009) contended that authors who write with discipline and strict adherence to style guidelines likely will increase publication chances, and also increase the likelihood to publish in a journal with high visibility for stakeholders and policymakers. Designed to address integrating writing style elements in coursework, Part II of the Checklist is presented in the same organizational format as Part I, and is the scoring rubric for writing quality and adherence to APA (2010) style guidelines. In addition, the final page of Part II of the Checklist allows the instructor to add additional points for a student who has provided detailed references with respect to one or more sections of a notebook. Thus, Part II of the Checklist facilitates the technical application of writing style for students through the exemplar qualitative notebooks. Appendix A presents Part II of the Checklist (i.e., adherence to APA [2010] style guidelines), directly after Part I of the Checklist.

The Interactive Writing and Feedback Process

According to Richardson and St. Pierre (2005), writing represents a method of inquiry and is more than a reactive process. In the interactive writing and feedback process of the qualitative course model for teaching and learning qualitative research (Onwuegbuzie et al., 2009), writing is developmental, interactive, and a meaning-making endeavor. The Checklist Part I and Part II, with the Notebook assignments, facilitate dialogue between students and instructors toward the exchange of ideas and collaboration for writing reports. Moreover, students are led to recognize that the Checklist is a foundational guide for qualitative research, and that becoming a life-long qualitative researcher is indeed possible. However, both instructors and students must maintain particular roles and responsibilities during the interactive writing and feedback process so that data collection, data analysis, and data interpretation might be integrated and internalized for autonomous learning.

Instructor Role and Responsibilities

Feedback is considered a strong element for effective learning (Bangert-Drowns, Kulik, Kulik, & Morgan, 1991). Detailed feedback is at the crux of an instructor's responsibility as a professional educator, researcher, and motivator. As such, formative feedback helps students reflect on their levels of performance and take greater responsibility for their actions (Butler, 2004). Appendix B³ presents an excerpt from one qualitative notebook and the detailed feedback given by an instructor using the comment feature of a Word document.

Student Role and Responsibilities

Students who are active participants in learning are more likely to understand course material than if they are passive receptors in a classroom presentation (Ramsden, 1992). Furthermore, Le Brun and Johnstone (1994) suggested that student attitudes and values are affected by class participation, and that participation also increases motivation and emphasizes a student's responsibility for learning. Students' responsibilities include addressing feedback presented by instructors in a reflective and meaning-making endeavor to include *attending* (spending time with the event) and *affirming* (accepting and valuing the event, even if the first response may be to disregard it) (Kolb, 1984). Thus, it is important to note that students should regard feedback as a positive, developmental component of writing qualitative reports.

The Reflexive Journal

Systematic reflexivity is an integral consideration in qualitative research, and "collecting and critically reflecting on researcher bias in a systematic manner can greatly enhance the legitimation of accounts of social and behavioral phenomena" (Onwuegbuzie et al., 2008, p. 2). Through the reflexive journal (Cunliffe, 2004), students regard all aspects of the

³Appendix B is posted online at http://www.uncw.edu/cte/et/articles/Vol11_1/FrelsAppB.pdf.

qualitative research course, including the qualitative notebooks, the biases they bring to the course, their personal investment in and commitment to the course, and their relationships as a result of the interactive writing and feedback process. As a result, the purpose of the reflexive journal is two-fold: (a) to become a critically reflexive practitioner (Cunliffe, 2004) and (b) to integrate reflective learning (Kolb, 1984). Thus, students maintain the journal through personal entries on a weekly basis.

Reflections on the Process

Students' Perspectives

Upon first impression, students who have not taken a research class might be overwhelmed at the extensive nature of the Checklist. Even though the terminology of the Checklist items is introduced in Phase I and Phase II of the qualitative course, the list might appear intricate or complicated upon first glance. To understand the cognitive and emotional responses of students taking the four phase qualitative course, Frels, Stark, and Onwuegbuzie (2010) examined the reflexive journals of one class and uncovered that emotional changes accompanied the developmental phases of learning. With respect to the initial introduction to the Checklist, one student noted,

Oh my goodness! We got a rubric tonight about our first notebook and I had no idea of any of the words the professor used or even what he was talking about! It is a good system, but sometimes we rush through so much I tend to zone. I asked and he clarified and then I think I understood a little bit more, but I feel like a contestant on the Amazing Race. I get a clue and then use my energy and detective skills to figure out what's going on. I think I'm smart enough, and I think I can persevere, so okay. But, I really love the enthusiasm that our teachers have.

Another student explained,

The class work is very demanding. I am not sure what to expect on the first write up. There were a lot of challenges. I could not believe the immense number of items on the rubric. If I can make a suggestion...it would be the need for a model write up.

In addition, as students receive feedback via both Part I and Part II of the Checklist at the same time, instructors might recognize that even though formative feedback is a purpose of the Checklist, the first time students receive the Checklist, they might focus more on their number score than their developmental growth as a researcher. One student explained,

I think I did well on my first qualitative notebook, but I am still not sure what my grade is. I earned a B on one section, a C on another section, and an A at the end. I hope the A is correct; it was on the last page.

Similarly, when receiving the first assignment's feedback, another student noted,

The rubric is very confusing, and I believe that the professors should have taken a class session to explain the points. There were many times that I thought I had mentioned the appropriate information, but I was informed that I stated it incorrectly.

Taking into account the detailed nature of the Checklist, the emotional response of students might include feelings of being overwhelmed due to not only the new concepts introduced, but also to the vast number of items included in the scoring checklist. Indeed, one student remarked,

I feel lost at times when I am writing in this class because of the strict rubric. I sat down and went through each point and found that this is going to be very difficult. Some of the material that we have to cite is nowhere to be found. I mean it is tough, and writing for such rigorous standards for the first time is a challenge. I hope that our inexperience is taken into account. It should be an interesting write up. It will take time to master this writing style. With practice anything can be done.

Furthermore, course instructors should recognize that even though the scoring checklist provides the framework for students to write each qualitative notebook, it is the feedback that accompanies the assignment that promotes reflective growth. Often times, students might not respond to the feedback positively. In fact, one student responded, “We got back our first papers and I was a bit embarrassed with the errors I made regarding citations. I could have made a decent A without them.” However, to evidence the confidence that accompanies the third and fourth phases of the course, one student noted that,

I arrived 30 minutes early tonight and mapped out our last three assignments. I really think I would like to do qualitative research, but just not for my dissertation; I want to do it in my career. I have been thinking so much this week about how to even write the paper on ethnographic analysis and discourse analysis, because truly I can only skim the surface with these designs...I wish we had more time. This class is too short.

Also, with respect to the writing growth that occurred after the use of the Checklist, another student observed,

The [Checklist] has begun making sense. I met with the professors and found that they can explain concerns at a human level. I was impressed with the effort taken to design such a rubric. Honestly, once I began to believe in it, it made a lot more sense, and I could begin to see how I needed to address these issues in my own write-ups. When I wrote my first write-up it became apparent to me that I was not a competent writer.

As a testament to the impact of the use of the Checklist, three of the seven doctoral students participating in the four-phase model qualitative research course deemed the Checklist as foundational in the success of their dissertation research. Other students in

the class either engaged in quantitative dissertation studies or have yet to complete the dissertation process. In fact, at the conclusion of the class and in the emergent scholar phase, the three doctoral students who used the checklist to help in conducting their dissertation research embarked on co-authoring this article because they believed that their qualitative expertise and writing expertise were results of the use of the Checklist as both a guide and an assessment tool.

Instructors' Perspectives

As noted by Frels et al. (2010), professors of the four-phase model for teaching and learning qualitative research observed that teaching this course for the first time at an institution might generate heightened levels of anxiety initially because students are taken on a journey with no prior history as to how this journey will end. However, as the course unfolds and students advance down the path of learning, many, if not most, of them begin to trust that the destination will yield positive outcomes. The second time the course is taught at the same institution, one or more students who previously took this course are asked to team-teach the course, thereby serving as teaching assistants. These teaching assistants not only can validate the initial trepidation of the new students, but also they can assure them that the journey on which they are embarking will maximally prepare them to be both consumers and producers of qualitative research. Thus, these teaching assistants continue to grow as emergent scholars (i.e., Phase 4), as they help the new students negotiate the first three phases of the course. Indeed, these teaching assistants likely are in a better position than are the instructors to identify the items on the Checklist that are causing the most problems. In addition, the teaching assistants facilitate the new students' understanding of the interactive nature of the course (e.g., how the notebook, instructor feedback, and reflexive journal processes work together), which is key for the new students' journeys. As this course is taught over the years, a *culture of scholarship* ensues.

Implications

A qualitative course that combines experiential learning through a dialogical process allows participants, as noted by Brookfield (1985), to “encounter experiences, attitudinal sets, differing ways of looking at their personal, professional, political, and recreational worlds and a multitude of varying purposes, orientations, and expectations” (p. 41). The changing field of qualitative research, as noted by House (2005), involves the role of researcher as a methodological and interpretive *bricoleur* acting as “an artist, a quilt maker, a skilled craftsperson, a maker of montages and collages [who can] interview, observe, study material culture, think within and beyond visual methods...” (p. 1084). In her approach to teaching qualitative research, Lapadat (2009) explained a “triumvirate of methodology instruction” (p. 957) wherein learning involves three main strands: (a) learning *what* (i.e., familiarity with the language, concepts, theories, history, debates within the field); (b) learning *how* (i.e., focusing on a study, conducting interviews, transcribing tapes); and (c) recognizing *doing* (i.e., engaging and identifying with the self's values, emotions, and understanding the human conditions associated with qualitative research).

In addition, Bizzell (1992) explained that often times instructors fall into the trap of teaching academic discourse “as if it were a matter of a static relationship between individual student and ‘body’ of knowledge: step by step, through ‘requirements’ and ‘prerequisites’” (p. 145). As a result, this approach might leave students struggling to seek comprehensive knowledge to increase understanding (Bizzell, 1992). Conversely, the Checklist serves as a guide for technical and cognitive discourse because it seems to be a repetitious and stabilizing component to increase learning and dialogue.

Even though the interactive use of the Checklist and the Qualitative Notebooks was designed for the purpose of an introduction to qualitative research course involving data analysis for a case study, the Checklist would be a valuable tool as both a guide and rubric for other frameworks within the qualitative tradition (e.g., phenomenological research, ethnographic research, grounded theory). In addition, items could be added or subtracted from the Checklist to adapt it for various levels of instruction (e.g., undergraduate, master’s level). Thus, the Checklist becomes a launching pad for students and beginning researchers to embark upon the technical, logistical, ethical, personal growth, and awareness involved in becoming emergent qualitative scholars.

Conclusion

Knowledge is acquired through an individual’s interaction with social processes and contexts (Kelly, 1955; Piaget, 1954; Vygotsky, 1978). Kolb (1984) contended that learning is a continuous, holistic, and adaptive process wherein a person experiences a range of emotions, increased awareness, and innovative conceptualizations. Hence, the interaction of writing and feedback (socially and contextually) between instructors and students after using the Checklist continues well after students have completed the qualitative coursework. Describing a holistic approach to academic writing, educators Antoniou and Moriarty (2008) noted that “privately, many academics struggle with their writing, that they often cannot find time and space to write, experience fear and anxiety about writing, feel they lack knowledge and expertise, and worry they are not good enough” (p. 158). With this in mind, as instructors and students, we hope that the Checklist, when used with the 13-step methodological framework (Leech & Onwuegbuzie, 2010) for qualitative research, offers advantages for instructors and sheds light upon the qualitative research process for students for confidence in writing rigorous qualitative research reports.

References

- Adler, P. A., & Adler, P. (1987). *Membership roles in field research*. Thousand Oaks, CA: Sage.
- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Antoniou, M., & Moriarty, J. (2008). What can academic writers learn from creative writers? Developing guidance and support for lecturers in higher education. *Teaching in Higher Education, 13*, 157-167. doi:10.1080/13562510801923229

- Bangert-Drowns, R. L., Kulik, C. L., Kulik, J.A., & Morgan, M. T. (1991). The instructional effect of feedback in test-like events. *Review of Educational Research*, 61, 213-238. doi:10.3102/00346543061002213
- Bizzell, P. (1992). *Academic discourse and critical consciousness*. Pittsburgh, PA: University of Pittsburgh Press.
- Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), 3-15. doi:10.3102/0013189X034006003
- Brookfield, S. D. (1985). *Self-directed learning: From theory to practice. New directions for continuing education*. San Francisco, CA: Jossey-Bass.
- Butler, S. (2004). Question: When is a comment not worth the paper it's written on? Answer: When it is accompanied by a level, grade or mark! *Teaching History*, 115, 37-41.
- Chenail, R. J. (2007). *Teaching and learning qualitative research references*. Retrieved from <http://www.nova.edu/ssss/QR/Teaching.pdf>
- Christians, C. G. (2005). Ethics and politics in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (2nd ed., pp. 139-164). Thousand Oaks, CA: Sage.
- Clarke, E. G. (1985). Grading seminar performance. *College Teacher*, 33, 129-133.
- Constas, M. A., (1992). Qualitative analysis as a public event: The documentation of category development procedures. *American Educational Research Journal*, 29, 253-266. doi:10.2307/1163368
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five traditions* (2nd ed.). Thousand Oaks, CA: Sage.
- Cunliffe, A. L. (2004). On becoming a critically reflexive practitioner. *Journal of Management Education*, 28, 407-426. doi: 10.1177/1052562904264440
- Denzin, N. K., & Lincoln, Y. S. (2005). The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln, (Eds.), *Sage handbook of qualitative research* (3rd ed., pp. 1-32). Thousand Oaks, CA: Sage.
- Flanders, N. A. (1970). *Analyzing teaching behavior*. Reading, MA: Addison-Wesley.
- Frels, R. K., Stark, M. D., & Onwuegbuzie, A. J. (2010). *Experiences of students and teachers of a qualitative research course: The journey of becoming a researcher*. Unpublished manuscript. Sam Houston State University, Huntsville, TX.
- Fontana, A., & Frey, J. H. (2005). The interview: From neutral stance to political involvement. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (2nd ed., pp. 695-727). Thousand Oaks, CA: Sage.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage.
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 191-215). Thousand Oaks, CA: Sage.
- Henson, K. T. (2007). Writing for publication: Steps to excellence. *Phi Delta Kappan*, 88, 781-786.
- House, E. R. (2005). Qualitative evaluation and changing social policy. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 191-215). Thousand Oaks, CA: Sage.

- Hurworth, R. E. (2008). *Teaching qualitative research: Cases and issues*. Rotterdam, NY: Sense Publishers.
- Janesick V. J. (2004). *Stretching exercises for qualitative researchers* (3rd ed.). Thousand Oaks, CA: Sage.
- Kelly, G. A. (1955). *The psychology of personal constructs*. New York, NY: Norton.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Lapadat, J. C. (2009). Writing our way into shared understanding: Collaborative autobiographical writing in the qualitative methods class. *Qualitative Inquiry*, 15, 959-976. doi: 10.1177/1077800409334185
- Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern*. New York, NY: Routledge.
- Lather, P. (1993). Fertile obsession: Validity after poststructuralism. *Sociological Quarterly*, 34, 673-693. doi:10.1111/j.1533-8525.1993.tb00112.x
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1), 31-60. doi: 10.3102/00346543052001031
- Leech, N. L., & Onwuegbuzie, A. J. (2008). Debriefing. In L. M. Given (Ed.), *The Sage encyclopedia of qualitative research methods* (pp. 199-201). Thousand Oaks, CA: Sage.
- Leech, N. L., & Onwuegbuzie, A. J. (2010). *Qualitative data analysis: A step-by-step approach*. Unpublished book.
- Le Brun, M., & Johnstone, R. (1994). *The quiet revolution: Improving student learning in law*. Sydney, Australia: Law Book Company.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Linn, R. L., & Gronlund, E. (1999). *Measurement and assessment in teaching*. Englewood Cliffs, NJ: Prentice Hall.
- Maxwell, L. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62, 279-300.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Onwuegbuzie, A. J. (2003). Effect sizes in qualitative research: A prolegomenon. *Quality & Quantity: International Journal of Methodology*, 37, 393-409.
- Onwuegbuzie, A. J. (2010). *Checklist for Qualitative Data Analysis Notebook* (Version 4). Sam Houston State University, Huntsville, TX.
- Onwuegbuzie, A. J., & Combs, J. P. (2009). Writing with discipline: A call for avoiding APA style guide errors in manuscript preparation. *School Leadership Review*, 4(1), 116-149.
- Onwuegbuzie, A. J., Combs, J. P., Slate, J. R., & Frels, R. K. (2010). Editorial: Evidence-based guidelines for avoiding the most common APA errors in journal article submissions. *Research in the Schools*. Retrieved from http://msera.org/download/RITS_16_2_APAErrors6th.pdf
- Onwuegbuzie, A. J., & Leech, N. L. (2003). Assessment in statistic courses: More than a tool for evaluation. *Assessment & Evaluation in Higher Education*, 28, 115-127. doi: 10.1080/0260293032000044465

- Onwuegbuzie, A. J., & Leech, N. L. (2006). Linking research questions to mixed methods data analysis procedures. *The Qualitative Report*, 11, 474-498. Retrieved from <http://www.nova.edu/ssss/OR/QR11-3/onwuegbuzie.pdf>
- Onwuegbuzie, A. J., & Leech, N. L. (2005). The role of sampling in qualitative research. *Academic Exchange Quarterly*, 9, 280-284.
- Onwuegbuzie, A. J., & Leech, N. L. (2007a). Validity and qualitative research: An oxymoron? *Quality & Quantity: International Journal of Methodology*, 41, 233-249. doi:10.1007/s11135-006-9000-3
- Onwuegbuzie, A. J., & Leech, N. L. (2007b). A call for qualitative power analysis. *Quality & Quantity*, 41, 105-121. doi:10.1007/s11135-005-1098-1
- Onwuegbuzie, A. J., & Leech, N. L., & Collins, K. M. T. (2008). Interviewing the interpretive researcher: A method for addressing the crises of representation, legitimation, and praxis. *International Institute for Qualitative Methodology*, 7(4), 1-17.
- Onwuegbuzie, A. J., Leech, N. L., Slate, J. R., Stark, M., Sharma, B., Frels, R... & Combs, J. P. (2009, February). *A model for teaching and learning qualitative research*. Paper presented at the annual meeting of the Southwest Educational research Association, San Antonio, TX.
- Onwuegbuzie, A. J., Slate, J. R., Leech, N. L., & Collins, K. M. T. (2009). Mixed data analysis: Advanced integration techniques. *International Journal of Multiple Research Approaches*, 3, 13-33.
- Paisley, P. O., & Reeves, P. M. (2001). Qualitative research in counseling. In D. C. Locke, J. E. Myers, & E. L. Herr (Eds.), *The handbook of counseling* (pp. 481-498). Thousand Oaks, CA: Sage.
- Piaget, J. (1954). *The construction of reality in the child*. New York, NY: Basic Books.
- QSR International Pty Ltd. (2008). *NVIVO: Version 8. Reference guide*. Doncaster Victoria, Australia: Author.
- Ramsden, P. (1992). *Learning to teach in higher education*. London: Routledge.
- Richardson, L., & St. Pierre, E. A. (2005). Writing: A method of inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 959-978). Thousand Oaks, CA: Sage.
- Spradley, J. P. (1980). *Participant observation*. Fort Worth, TX: Holt, Rinehart and Winston.
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (2nd ed., pp. 443-466). Thousand Oaks, CA: Sage.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Werner, O., & Schoepfle, G. M. (1987). *Systematic fieldwork: Ethnographic analysis and data management*. Newbury Park, CA: Sage.
- Yin, R. K. (2009). *Case study research: Design and methods*. (4th ed.). Los Angeles, CA: Sage

Cheating In Online Courses: The Student Definition

Deborah A. Raines,¹ Peter Ricci, Susan L. Brown,
Terry Eggenberger, Tobin Hindle, and Mara Schiff
Florida Atlantic University, Boca Raton Florida 33431

Abstract

One of the barriers to faculty acceptance of online teaching and learning is a concern about cheating and the quality of the learning experience. This paper reports the findings of a descriptive survey focused on the students' definition of cheating in the online learning environment.

Keywords: Cheating, online teaching, student perspective.

Cheating is a common phenomenon on American college campuses (Harmon & James, 2008). Among college educators there is a widespread belief that academic misconduct is on the rise (Hard, Conway, & Moran, 2006). However, the problem is not new. A 1952 study at eleven colleges found that nearly two-thirds of students admitted to cheating (Harp & Taietz, 1966). The major difference in today's academic environment is the proliferation of technologic devices for delivering and accessing course information. This issue is central to online course delivery because in the absence of the physical proctoring of course work and confirmation of the student's identification, the question of who is taking an examination or completing an assignment and how information is being accessed is problematic to some faculty and administrators. Educators are concerned about the impact of technology on various forms of academic dishonesty. Some sources have implicated the internet as a major culprit for the high incidence of academic dishonesty (Scott, 2001). However, other sources state that the internet and technology has simplified the act of cheating for those so inclined to do so (Boehm, Justice, & Weeks, 2009). Yet, Herberling (2002) asserts, "a strong case can be made that it is actually harder to cheat online and that it is also easier to detect" (para. 3). While there are numerous publications about the concerns and incidence of student cheating, the more recent discussion has turned to the online learning environment and how it may change the way students approach cheating (Charlesworth, Charlesworth & Vician, 2006).

The number of students participating in college level online courses has outpaced all other forms of distance learning. The growth in online learning opportunities has intensified the concerns about cheating in online courses. In a 2004 Sloan C study, "the majority of all schools agreed that online education is critical to their long-term strategy (Allan & Seaman, 2006). In the fall of 2008, colleges saw a 17% increase in online enrollment with more than 1 in 4 students taking at least one online course or a total of

¹ Corresponding author's email: Deborah.Raines.Phd@gmail.com

more than 4.6 million students overall (Allan & Seaman, 2008). This growth rate eclipses the 12 % increase and dwarfs the 1.2% overall growth rate in the higher education student population (Trenholm, 2007). With such a fast introduction and rapid rise in the popularity of this instructional innovation in higher education, major stakeholders including faculty and administrators continue to discuss and debate the nature and extent of the integrity and quality of the online educational experience. Therefore developing an understanding of what students define as cheating in online learning environments is important to faculty, administrators and students.

Literature Review

There are numerous studies that demonstrate the prevalence of cheating at four-year institutions. The rate of cheating has been found to vary from 30% to 96% (McCabe & Trevino 1977; Payne & Nantz, 1994; Nonis & Swift, 2001; Owings, 2002; Pino & Smith, 2003). Howe and Straus, (2003) identified that students of the millennial generation have no clear distinction between traditional notions of exam cheating and the modern notion of information “morphing” (p. 120) and have a difficulty recognizing traditional operational definitions of academic dishonesty. This is consistent with the findings of Burrus, McGoldrich & Schuhmann (2007) who found that students do not understand what constitutes cheating. Similarly, Higbee and Thomas (2002) found significant discrepancies between the operational definitions of cheating by students compared to those of faculty which may reflect a difference in values related to student and faculty roles or generational differences. Both author groups identify the socialization to a high degree of team orientation and the intense pressure that many feel for academic success among the millennial generation of college students.

A number of studies have examined factors associated with a higher frequency of cheating. However the findings are related to non-course specific factors such as: male gender, membership in Greek social organizations, individuals with low self-esteem, and major in that graduate business student cheated more than graduate students in non-business majors (Eastman, Iyer, & Reisenwitz, 2008; Mangan 2006; McCabe, Trevino & Butterfield 1999). Interestingly in a study by Black, Greaser, & Dawson (2008), it was found that factors known to contribute to academic dishonesty in the face to face class have little influence in online courses. However these factors were not described. Similarly, Spaulding (2009) found no significant differences in students’ perception of the academic integrity of their own behavior or other students’ behavior based on course type (face-to-face or online).

Grijalva, Nowell & Kerkvliet (2006) found that teachers and institution of higher education perceived that the frequency of cheating would be higher in online courses because students and faculty do not interact directly. However, in a follow-up survey of students, they discovered no difference in the reported incidence of cheating in online or tradition classroom settings (Grijalva, Nowell & Kerkvliet, 2006). Both students and faculty perceive that cheating occurs more frequently in virtual classrooms because online students are often believed to be more tech savvy than their ground-based classmates or are less

likely to be detected by faculty who are unfamiliar with online detection techniques (Grijalva, Nowell & Kerkvliet, 2006)

Overall, the literature on the extent and determinants of cheating on college campuses is quite extensive. The evidence supports that student cheating does exist and it is non-course related factors that influence the incidence of cheating. From the existing literature there is support that cheating is an action of the individual. However, most of the existing empiric work is focused on cheating in general and does not examine whether cheating behaviors are different or unique in online classes. Consequently there is a paucity of literature on what constitutes cheating in online courses. The purpose of our study was to begin to fill this gap in the empiric literature, by developing an understanding of the definition of cheating in an online course, from the perspective of the student.

Methods

The purpose of this research was to understand the meaning of cheating from the perspective of the student. As part of a larger cross-sectional, non-experimental survey, participants were asked to share their definition of cheating in the context of academic course activities in the online environment.

Using purposeful sampling, students enrolled in fall 2009 courses on one of the university supported online course platforms (Blackboard and e-College) were contacted. A message explaining the purpose of the research and inviting their participation was sent to all enrolled students. Students were directed to an online data collections site to anonymously respond. Submission of their response to the WEB-site's secured server was evidence of the student's consent to participate. The study was reviewed and approved by the University Institutional Review Board (IRB) and the university's department of institutional assessment and evaluation.

Participants were asked to respond to a single open ended item, what is your definition of cheating and to complete demographic descriptors for the purpose of describing the composition of the respondents. There was no personal identifying information; such as the student's logon credentials, student ID or computer IP address linked to the response.

Responses were collected and analyzed for evidence of common words that give meaning to the definition of cheating. A qualitative approach to data analysis which includes an inductive phase to identify dimensions of cheating behaviors as perceived by these participants and a deductive phase to reduce the data to common themes was used. Evidence of common themes is exemplified by quotes that provide a rich description of a component of the behavior.

An audit trail was established through the field notes maintained by the lead researcher during the initial reading and re-reading of the data and by coding and tracking schemata used in the analysis and reduction of the data. These notes include bracketing to control for research bias and the researcher's impressions associated with exposure to the data during the encounter.

Results

A total of 1028 students responded. Because many students are registered for more than one course and may be enrolled in courses on both the university's course management systems, the percentage of the population responding to the survey is impossible to accurately calculate. However, the demographic characteristics of the sample are similar to the proportion of on line learning across the university with one exception. This sample has a higher than expected representation of freshman. The reason for the over-representation of freshman is related to the freshman reading program online community site being on the university's blackboard server. Respondents were sixty percent undergraduate students, mostly female, and represented all of the university's colleges. Fifty-four percent of respondents were 26 years of age or older. Demographic attributes of the respondents are provided in Table 1. Three themes, breaking the rules, dishonesty and not using your own brain were evident in over 60% of the responses. The process of completing course activities was the focus of these replies.

Table 1: Attributes of respondents (n=1028).

Student Attribute		Number	Percentage
Class level			
	Freshman	119	11.5
	Sophomore	77	7.5
	Junior	169	16.4
	Senior	245	23.9
	Graduate	418	40.7
College/Major			
	Arts and Letters	127	12.3
	Business	253	24.6
	Design and Social Issues	93	9.1
	Education	222	21.6
	Engineering and Computer Sciences	72	7.1
	Honors	29	3.2
	Nursing	100	9.7
	Sciences	56	5.3
	Undecided	76	7.1
Gender			
	Female	728	70.8
	Male	300	29.2
Age			
	Less than 18 years	7	0.6
	18-21 years	268	26.4
	22-25 years	206	20
	26-35 years	239	23.2
	36-45 years	133	12.9
	46-55 years	132	12.8
	Over 55 years	43	4.1

Six hundred and seventy-four respondents (66%) referenced doing something that is contrary to the university honor codes or policies, course expectations, professor's guidelines or the syllabus as the standard for identifying a behavior as evidence of cheating. Typical responses illustrative of the theme breaking the rules include:

- “Using resources expressly prohibited by the professor to complete an assignment.”
- “Breaking a rule on the syllabus.”
- “Doing an assignment or taking a test in any way that has not been defined by the professor.”
- “Gaining information using ways the professor has not authorized.”
- “Using sources other than those permitted.”
- “To obtain the answers by deceiving the professor.”
- “Breaking the rules of the exam (expressed or implied). The implied area can be tricky, as some people see cheating as being resourceful and will exploit anything not expressly outlawed.”

In their descriptions of cheating, students consistently mention behaviors that were outside the rules or authorized sources. However, a number of respondents noted that there are differences in the “rules” for online and classroom courses.

- “They are different for online and traditional courses. Online professors usually tell you if a test is open-book or proctored.”
- “Looking at material to help you during a test. But in online courses one can look at the book and class notes, but you can't look up the answers online. That is one advantage of taking online courses.”

When an individual's actions, behavior or conduct was not consistent with a set of policies or expectations from a specific source such as the university honor code, course syllabus or professor it contributed to the theme of dishonesty. This second theme of dishonesty is broader than simply breaking the rules. Dishonest behaviors involve those norms of wrong behavior that go beyond a specific situation or course activity. Dishonesty is determined by the accepted norms of society's behavioral expectations and includes misrepresentation, lying, stealing and buying goods. Student's responses indicating dishonesty included:

- “Misrepresenting assignments as your own work, when they are not.”
- “Presenting work that is not yours as your own.”
- “Lying, getting answers in advance, for example, storing answers on the memory of a calculator.”
- “Buying papers, stealing answers and copying others work. All the things your mother taught you were dishonest to do.”
- “Doing something that you could not tell your parents or professor.”

The final theme evident in a majority of the responses was “not using your own brain”. This theme focused on the authentic nature of the work as a representation of the individual’s learning and knowledge.

- “not using one’s own brains to do the work”
- “Intentionally using an answer that you did not come up with on your own and that you would be unable to explain how to arrive at that solution on your own.”
- “not using your own thoughts or ideas.”
- “submitting work that does not originate from yourself.”
- “Not using your own mind.”
- “Submitting answers that are not of your own creation.”
- “Getting information for a test from a source other than your own mind.”
- “Turning in what is not yours, information that you did not discover by your own means.”
- “Not using your god given equipment (Brain) to succeed.”

A second group defined attributes of cheating by focusing on the tangible outcomes of cheating. Approximately 39% of respondents included a reference to using unfair advantage to gain benefit in their response. In all cases, the benefit or gain mentioned by the student was a passing or higher grade.

- “Using someone else’s work or brain power for your benefit.”
- “Obtaining information by non-ethical means to pass a course, test or assignment.”
- “Using someone else’s work to get a better grade.”
- “Taking advantage of information or resources, known only by the cheater, to improve their grade.”
- “Using unconventional means like stealing exams or information and buying answers or assignment in order to excel.”
- Any advantage used to improve your grade that is not available to everyone.”

Finally a small percentage (3%) of students were unable or unwilling to define cheating or indicated that cheating only occurred if the person was caught.

- “Cheating is hard to define. I see nothing wrong with students helping each other when it comes to school work and testing. It’s all about learning together and passing the course.”
- “I don’t know.”
- “I don’t want to think about it.”
- “I don’t think it is a problem.”
- “Its not cheating unless you get caught.”
- “To test online and not expect people to cheat would be unrealistic. People are opportunistic and will take advantage of situations when given the chance.”

- “As long as the student is willing to put their name on the work, it is not cheating.”

While this final theme represents a small minority of the respondents it is important to note that a portion of the student hold these beliefs.

Discussion

The major finding of this study was that the majority of students in the online environment were able to define cheating. Across all the definitions was recognition of the unique characteristics of online learning and that there are differences between the expectations in an online and classroom based course. A clear majority of these students identified breaking the rules, dishonesty and not doing the work as behaviors emblematic of cheating. While these behaviors are internally motivated, the students noted they are influenced by the boundaries of the learning behaviors established in each course by the faculty. These students did not view cheating as a means of succeeding. However, slightly more than one-third of respondents did perceive cheating as a way of achieving success. These participants defined cheating in terms of external motivators or the tangible outcome, most frequently better grades. These findings shed considerable light on the students' perspective of cheating in online courses and have implications for faculty teaching in the online environment.

The results of this study indicate that students look to faculty to set the boundaries of acceptable learning behaviors. Faculty need to establish and communicate the boundaries of acceptable learning behaviors in online courses. Faculty and students need to acknowledge that these boundaries in an online and electronic-based environment will vary from the boundaries in a classroom and paper-bound course. Instantaneous information access is an advantage of the online learning experience: students are not confined to the resources the faculty brings to the class setting. But faculty while nurturing skills in seeking knowledge and connecting in the online world need to establish the boundaries on the role of accessing information as related to student learning assessment activities. Also, in online courses, teamwork and collaborative activities are often intertwined with individual assignments. It is incumbent on the faculty to make a clear distinction between which aspects are individual work and which aspects are collaborative work. Online course platforms have many ways to support a learning environment that rewards effort, perseverance and positive learning behaviors. Faculty need to be knowledgeable of these mechanisms and use them to facilitate positive student learning and to establish the boundaries of acceptable learning behaviors.

From a sociologic perspective cheating is conceptualized as a form of deviance and involves a consideration of the norms to which the members of a system are oriented and subsequent deviation from the expectations (Bowers 1964). The majority of students in this study cited behaviors consistent with a sociologic perspective of deviance as their definition of cheating. Understanding students' perceptions of cheating in online courses is important for faculty and course developers. Perceptions are influenced by past experience, memories, expectations and the context in which any given experience occurs.

Perception is the result of a process through which the brain organizes and interprets what happens in one's environment. One reason it is important to understand perceptions is because perceptions provide a valuable reflection of the belief that individuals hold, in this case, a reflection of the students' beliefs about academic dishonesty. Beliefs are the foundation of actions. If a student does not believe that an act is cheating, they are likely to do it. Therefore it is incumbent on faculty and course designers to provide students with clear guidelines and boundaries about the acceptable and non-acceptable behaviors and actions. In designing online courses, faculty need to consciously design learning activities and assessments that are multifaceted and collect data about the unique learning experiences of each student and to minimize the opportunities and the temptation to cheat.

In conclusion, this study provides faculty and administrators knowledge about student's perception of the definition of cheating in online courses. The word of one student's reflection illustrate the meaning and implications of cheating to the overall learning experience and what it means to 'earn' one's degree.

I define cheating as being dishonest and disloyal to yourself [sic]. What would you really get out of a course if you cheated half way or the whole way through just to pass exams, get assignments turned in on time and pass the course? What would you learn from that? How would that make you feel if you were walking up to the stage to receive your diploma and shake the hand of the President of the university, knowing that you cheated 25%, 50%, 75% or the whole 100% of your college career just to graduate? I know what I would think: "I cheated for all this!"

Knowledge about the unique aspects of online learning environments is critical to faculty and administrators in maintaining the quality and integrity of the higher education experience.

References

- Allen, I.E. & Seaman, J. (2006). *Making the Grade: Online Education in the United States*. Needham, MA: The Sloan Consortium.
- Allen, I.E. & Seaman, J. (2008). *Staying the Course: Online Education in the United State, 2008*. Needham, MA: The Sloan Consortium.
- Black, E.W. Greaser, J., & Dawson, K. (2008). Dishonesty in Traditional and online classrooms: Does the "media Equation" hold true? *Journal of asynchronous learning networks*. 12(3) 23-30.
- Boehm, P.J., Justice, M., & Weeks, S. (2009). Promoting academic integrity in higher education. *The Community College Experience* (spring) 45-61.
- Bowers, J.W., (1964). *Student Dishonesty and Its Control in College*. New York: Columbia University Bureau of Applied Social Research.
- Burrus, R.T., McGoldrick, K.M., Schuhmann, P. W. (2007). Self-Reports of Student Cheating: Does a Definition of Cheating Matter? *Journal of Economic Education*, 38 (1): 3-16.

- Charlesworth, P., Charlesworth, D.D., & Vician, C. (2006). Students' perspectives of the influence of web-enhanced coursework on incidence of cheating. *Journal of Chemical Education*, 83(9): 1368-1376.
- Eastman, J.K., Iyer, R., Reisenwitz, T.H. (2008). The Impact of Unethical Reasoning on Different Types of Academic Dishonesty: An Exploratory Study . *Journal of College Teaching and Learning* 5(12), 7-16.
- Grijalva, T.C., Nowell, C. & Kerkvliet, J. (2006). Academic honesty and online courses. *College Student Journal*. 40 (1) 180-185. Retrieved 5/20/10 at: http://findarticles.com/p/articles/mi_m0FCR/is_1_40/ai_n16346361/
- Hard, S. F., Conway, J.M. & Moran, A.C. (2006). Faculty and college student beliefs about the frequency of student academic misconduct. *Journal of Higher Education* 77(6): 1058-1080.
- Harmon, O.R. & James, L. (2008). Are online exams an invitation to cheat? *Journal of Economics Education*. Spring 116-125.
- Harp, J. & Taietz, P. (1966). Academic Integrity and Social Structure: A Study of Cheating among College Students. *Social Problems*, 13 (4) 365-373.
- Heberling, M. (2002). Maintaining academic integrity in on-line education. *Online Journal of Distance Learning Administration*, 5(1).
- Higbee, J. L. & Thomas, P. (2002). Student and faculty perception of behaviors that constitute cheating. *NASPA Journal*. 40 (1).
- Howe, N.S. & Straus, W. (2003). *Millennials go to college*. Washington D.C: American Association of Collegiate Registrars and admissions officers.
- Mangan, K. (2006). Survey finds widespread cheating in MBA programs. *The Chronicle of Higher Education*, 53(6), A.44.
- McCabe, D. L., Butterfield, K. D., & Trevino, L. K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning & Education*, 5(3), 294-305.
- McCabe, D. L., & Trevino, L. K. (1997). Individual and contextual influences on academic dishonesty: A multicampus investigation. *Research in Higher Education*, 38 (3), 379-396.
- McCabe, D.L., Trevino, L.K., & Butterfield, K.D. (1999). Academic Integrity in honor code and non-honor code environments: a qualitative investigation. *Journal of Higher Education*. 70(2), 211-234.
- Nonis, S.& Swift, C. (2001). An examination of the relationship between academic dishonesty and workplace dishonesty: A multi campus investigation. *Journal of Education for business* 77(2):69-77.
- Owings, L. (2002). Cheaters never win but they keep professors on their toes. *Silicon Valley San Jose Business Journal*.
- Payne, S.L. & Nantz, K.S. (1994). Social accounts and metaphors about cheating. *College Teaching*, 42(30) 90-96.
- Pino, N.W. & Smith, W. L (2003). College students and academic dishonesty. *College Student Journal*. 37(4) Retrieved May 20, 2010 from: http://findarticles.com/p/articles/mi_m0FCR/is_4_37/ai_112720412/?tag=content;coll
- Scott, K. (2001). Academic Dishonesty: The impact of honor codes of cheating perceived by student leaders in selected Texas Universities. *Dissertation Abstracts International*, 62, (105), 1359A. UMI No. 3011796.

- Spaulding, M. (2009). Perceptions of Academic Honesty in Online vs. Face-to-Face Classrooms. *Journal of Interactive Online Learning* 8(3). 183-198.
- Trenholm, S. (2007) A review of cheating in fully asynchronous online courses: A math or fact-based course perspective. *Journal of Educational Technology Systems*. 35(3) 281-300.