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Internalization and Service Learning In Spanish Courses: Second Culture Acquisition

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Martha Garcia is an Assistant Professor in the Department of Modern Languages & Literatures. She is a UCF alumnus and returned as a faculty member in 2005 from Vanderbilt University where she earned her Ph.D. She teaches Spanish language and

courses related with her concentration in Medieval and Golden Age Literature. She is currently working on her second book project and several other academic projects.

Teaching a second language implies the concept of teaching a *foreign language*, which leads the learner to think about exotic places, far away regions, and paradisiacal beaches or exuberant mountains. In reality, the art of teaching a language and its skills, denominated *second language acquisition*, requires also what I would call second culture acquisition. In other words, the students must not only learn the pragmatic skills of communication, but also be able to understand and embrace the culture of the target language. How can we achieve this objective without leaving our local community? I will explain here what I have found—in practice—effective and challenging to the majority of the students that are really committed to pursue their goals seriously.

In the Spanish conversation courses, the focus should be the development of speech through oral skills. However, the teacher, instructor, or professor will face the unavoidable: students do not feel comfortable speaking in the classroom atmosphere in their second language or even in their first language. This is an obstacle. The solution that I have implemented and applied has been including in the syllabus a component of *Internalization* and/or *Service Learning*.

Internalization:

During Fall 2008, I conducted a pilot session with the participation of two students, Jamie Mann and Natalie Novoa, in which I organized a teleconference with a small group of students

and their Professor, Julio Cañero, at the University of Alcalá de Henares in Spain. With the cooperation of the *Faculty Center for Teaching & Learning* and the *Office of International Studies* at UCF, we conducted two trials: the first trial was related with the connectivity and the set up of the equipment at both institutions; the second trial was the pilot where the live meeting took place. Both groups of students shared their opinions and knowledge related with the topics previously chosen by Professor Cañero and myself. Jamie and Natalie, both Spanish majors, communicated to them in the target language. On the other hand, the students from UAH, four students of English, communicated to UCF students in Spanish, and at the end of the session in English in order to practice their second language. Both groups took turns orderly and systematically to communicate in both their native language and the target language, respectively. Jamie Mann expressed her perceptions of this experience in this matter: "It is beneficial to observe that all of us were learning a second language and we deal with the same difficulties and concerns." Natalie Novoa reflected about the meeting with the following statement: "I found that the videoconference with the students from the University of Alcalá in Spain was very beneficial because it opened my understanding of students around the world." In sum, the pilot was a complete success, and a column addressing this implementation was published at the *Universidad de Alcalá de Henares Newsletter* in Spain.

Service Learning:

In our department of Modern Languages & Literatures, Professors Edwin Lamboy and Gregory Thompson integrated the Service Learning practice in oral communication for the first time in Spring 2008. I included a component of service learning as part of the requirements of my class of *Advanced Spanish Conversation* in Fall 2008. With the approval and collaboration of the *Service Learning* team at UCF and the support of *Junior Achievement*, the students were able to teach the target language at Orange County bilingual programs. The crucial fact here is that all of them—without exception as the final survey reflected—were able to use and improve their oral skills, their knowledge of the language, and their ability to express themselves in the target language. In addition, other groups of students in this class were able to participate in community programs at non-profit organizations, where they were ex-

posed to the Hispanic populations that form part of the Central Florida region. In this way, the students submerged themselves in the complexities and multi-realities of the acquisition of a language and its culture. This Spring 2009, I am moving towards to the next phase including *Service Learning* as a component—for the first time—in a course of Spanish Culture & Civilization.

A Final Thought:

How might these components—Internalization and Service Learning—be integrated in the other disciplines? I would say that every field of expertise, subject or course, possesses its own language, and consequently, its own culture. Following this thought, I believe that including some kind of internalization and/or service learning may facilitate the understanding and acquisition of the *target language* in each subject, and as I would say, *the acquisition of the target culture*, as well. Teaching in the twenty-first century requires the implementation of new and creative strategies to reach our students. Taking into consideration that we live in the era of globalization, *Internalization* and *Service Learning* assist professors in unifying the generational gap and may offer pleasant surprises to all the parties involved.

Integrating Climate Change in the non-Environmental Classroom

Terri Susan Fine



Terri Susan Fine is Professor of Political Science and Senior Fellow at the Lou Frey Institute of Politics and Government. She teaches courses in American politics with an emphasis on political participation.

UCF participated in the National Teach-In on Climate Change on February 5, 2009. Instructors were asked to incorporate climate change themes into their courses that day, while other university-wide activities took place such as panel discussions and other student-driven programming.

I had never incorporated environmental issues into my courses in a meaningful way, yet considered the challenge posed by my colleagues teaching in the environmental studies program. Could I incorporate climate change issues into my classes for one day? If so, how would I do it while still retaining the integrity of the course?

I found the exercise worthwhile, and student feedback suggested that they did as well. In my “Religion and Politics” course, I researched and presented views toward the environment by major Christian, Jewish and Muslim organizations. I then divided the class into groups and asked that they discuss the following questions:

What is the policy impact of an approach that treats human beings as the “managers” of the earth and not the “proprietors” of the earth?

In light of the current debate about the causes of climate

change, where do you see this debate going through the lenses of these three dominant faiths?

In my political science research methods course, we viewed a short video produced by the American Association for the Advancement of Science focusing on the factors that scientists measure when they are studying climate change. One of the core components of any discipline-specific research course is that one must first define one’s terms before studying any phenomenon. After viewing the film, I led a class discussion on whether or not students believed that the list of indicators (increasing temperature, precipitation, and sea levels) by the researchers was complete.

Later that day, in my “Politics and Civil Rights” class, I introduced the class to the concept of “environmental racism”, which takes many forms including the enforcement of environmental rules and regulations that have negative racial consequences, and the targeting of minority communities as the sites for polluting industries. After a short film on the subject, we then discussed how environmental racism was a civil rights issue, and how policy makers might respond to it. I chose a film that included residents working as community activists, and the many barriers that they faced when trying to protect their neighborhoods from pollution that took the form of industry siting and waste dumping. We then connected this issue to other civil rights issues and explored how “resource poverty” and institutional barriers impacted these activists’ efforts.

I found the experience to be well worth the preparation and effort. The challenge to incorporate a discussion of climate change, and other environmental issues, into my own courses, none of which focuses on the environment, seemed daunting at first. Accepting that challenge compelled me to look at climate change from three different perspectives, and to do so in a way that aligned with my course goals and objectives.

What’s the Difference Between the National Teach In on Global Warming, 2008 and 2009?

Penelope Canan



Penelope Canan is a Professor of Sociology and an environmentalist. She joined UCF in the Fall of 2006. She has served as the Executive Director of the Global Carbon Project and has won several awards, including Ozone Layer Protection Award of the U.S. EPA and the Driscoll Master Teacher Award at the University of Denver. She served as chair of the Environment and Technology Section of the American Sociological Association.

Students and faculty at American college and university Scampuses have been organizing environmental awareness events for more than 30 years as part of the growing environmental movement such as Earth Day 1970 and other events ever since. Recent examples include the Student Environmental Action Coalition (SEAC), the Energy Action Coalition, and the Campus Ecology program sponsored by the National Wildlife Federation. More recent, and large, organizing events have been “Chill Out,” “Power Shift,” and the National

Teach-In on Global Warming.

Unlike some movement organizations that have local chapters that follow “national rules,” today’s campus climate movement organizations are cyber-organized and operate with high levels of local autonomy. Each campus organizing committee creates its own unique contribution to the movement. The “national” office is really the web presence of a loose coalition of faculty, student, and community leaders who provide a clearinghouse of information and suggestions (like a menu of ideas), based on experiences at campuses across the nation. This is true of Focus the Nation (on solutions to climate change) and its National Teach-In on the subject.

The first National Teach-In (NTI) was organized between 2006 and 2008 by Dr. Eban Goodstein, an economist from Lewis and Clark University. His general idea, i.e., the goal of a national teach-in, was to share a national day of teaching, January 31, 2008, on global warming and climate change to galvanize the political will for immediate action.

At UCF last year, the organizers for the national teach in (1) chose to become an official UCF student club known as “Focus the Nation @ UCF,” (2) presented an all-day event in the Pegasus Ballroom of the Student Union on January 31, 2008 that involved hundreds of people from the community and from campus (the 2008 Program is on ftncf.org), and (3) helped produce the national kick off webcast, “The 2% Solution,” on January 30, 2008 (See earthdaytv.net to see UCF faculty and students.). Hunter Lovins, president of Natural Capitalism Solutions, gave the keynote address.

Last year, we called UCF’s teach-in a “Teach-In/Reach Out” because we showcased four academic lecturers AND many efforts that involved business and government leaders from local, state, regional and national levels (See the program on www.ftncf.org for all the participants last year).

This year, instead of January 31st, the date was February 5th. And, again thousands of colleges and university faculty and students were involved making the teach-in match their own campus interests, culture and resources. For 2009, FTN@UCF chose the “in-class” model of a teach-in and then partnered with other groups to produce events for faculty and students to plug into throughout the week of the National Teach In. The idea was to ask interested teaching faculty to work the topic of global warming into their existing courses and schedules in ways they deemed most appropriate. And, then, “in addition,” this year there were campus-wide events, public/free events, spread across February 3, 4, 5 to energize students and faculty to focus the country on the urgent need for investments in solutions to climate change.

For each day, FTN@UCF partnered with different campus and community groups to present a variety of activities at a variety of times of day. The partners included the Student Government Association, the Office of Undergraduate Studies, the Sustainability Alliance, the Office of Sustainability and Energy, and the Office of Service Learning. A panel of green business leaders from the Orlando metropolitan area highlighted the connections between campus and community on the last evening of the Teach-In.

Climate, Teaching, and Citizenship

Peter Jacques



Peter Jacques is an Assistant Professor in the Department of Political Science. His fields are domestic and international environmental politics and sustainability. He is also the Sustainability Fellow with Faculty Center.

Participating in the National Teach-In on Climate Change was not an abrupt break for me since I normally teach environmental politics courses, and climate is a regular issue area covered. I capitalized on this as a corroborative opportunity, where issues raised in “enviro” class may in fact have implications beyond that class. Indeed, students noted that they had already been in other classes the day of the Teach-In where lecture and discussion were centered on climate.

I feel compelled first to address an obvious tension regarding a teach-in and the liberal education ideal. Let’s face it: climate is deeply politicized. Under these conditions our efforts to be fair intermediaries of knowledge and thinking make a teach-in sound like inappropriate activism, and certainly some would say it is. It is because of this tension, I noted to my students that some critics had called this effort a “preach-in,” and asked them to decide for themselves. However, leaving the issue alone does not resolve the tension. In a country unique for its partisanship over climate (which we know from academic research), we may otherwise be disciplined not to ask questions about climate because it is too controversial (i.e., that to discuss climate privileges it as a problem in conflict with those who do not see it as one). Education works *against* these disciplinary tendencies, as I see it, because when there is a choice between approaching an issue or letting it be, the educational impulse revolts against this type of *laissez-faire* and teach-ins place bodies of knowledge in relation to civic discourse and thinking.

In both classes I was teaching, I conducted lectures on research and took time to reflect on specific literature—one on social and counter-movements, and one set of literature on abrupt and catastrophic regime shifts. The catastrophic regime shifts literature focuses our attention to scales across geography and time that are relevant in the interactions of ecologies and societies. This literature also proposes that it is sometimes possible to control slow-moving variables (like run-off into a fresh water system), but it is not possible to predict thresholds of regime change or to control the cascade of consequences. Together, slow moving, smaller variables across large scales will have unpredictable cascading and faster consequences at the smaller geographies across shorter times. We can control some human carbon emissions, but we will not be able to control the outbreak of bark beetles, the extreme weather events, or the release of neither permafrost nor oceanic methane belts that we expect to radically change the current climate regime. Local and regional scale variations fit within a nest of larger scale changes (in this way hurricanes, e.g., are not necessarily *caused* by global warming, but *fit within* a nest of large scale changes that affect the creation and intensity of hurricanes

and other weather events). From this body of knowledge, we face a whole host of political and ethical questions and decisions, most obviously the fact that industrial emissions are, by definition, a legacy of industrialized countries but poor less-industrialized countries will feel the brunt of climate change through drought, disease, and changes in food production. One recent interdisciplinary study shows that food production in tropical and sub-tropical areas will likely suffer some 20-40% in agricultural production. Three billion people, most of whom are already living on a knife's edge of vulnerability, live in these climates.

If we think of "propositions" as "injunctions to listen" then listening becomes one of the most important civic faculties we can develop. The teach-in provided an opportunity to take the time to listen and consider specific ideas that affect the climate demos and to the extent that UCF is working on being an environmental teaching and research university, these opportunities are incredibly important.

Assessment and Experience

Michael Strawser



Michael Strawser is an Assistant Professor in the Department of Philosophy and co-editor of *Florida Philosophical Review*, an online philosophy journal. Dr. Strawser has taught at the University of Central Florida since 2002, prior to which time he taught for ten years at Folkuniversitetet in Helsingborg, Sweden. His research interests include Kierkegaard, existential philosophy, and continental philosophy.

Even the President is talking about assessment. From the campaign trail in New Hampshire in November 2007 to March 10th, 2009, when he unveiled his specific proposals for public education, President Obama has repeatedly called for "innovative assessments." Although focused primarily on K-12 education and skill-based learning, Obama has clearly suggested that we need to develop alternative assessments that encourage our students "to become more than just good test-takers" and "that don't just test isolated bits of information." In his most recent speech, Obama called on education chiefs to develop "assessments that don't simply measure whether students can fill in a bubble on a test, but whether they possess 21st century skills like problem-solving and critical thinking, entrepreneurship, and creativity." Thus the time is ripe for thickening the discussion of assessment.

When we focus on higher education, however, where our goal is to educate and not merely train our students, we must be wary of the move to more standardized, "direct" measures of quantifiable "outcomes." Dean Adam Falk of Johns Hopkins University expresses his concern that assessment practices focused "on standardization and quantification will impel us to an impoverished vision of higher education that would do our nation a profound disservice." An even deeper worry is expressed by the holistic educators Sharon Solloway and Nancy Brooks, who suggest that the "standardization and instrumental application of knowledge is akin to violence." "We cannot," they note following Paul Ricoeur, "underestimate the

subtle nature of this violence to deceive us into complacency." So, at the very least, we need to reflect on our assessment measures and be aware of the potential for violence (i.e., forcing students to think about a question in one particular way and to confine their answer, for example, to a limited number of multiple choice or rubric options).

My current SoTL project is an attempt to extend the discussion initiated by Solloway and Brooks in their paper, "Philosophical Hermeneutics and Assessment," where they offer a new model of assessment based on Hans-Georg Gadamer's work, in particular his understanding of experience. This model has led me to begin developing a new assessment that is designed to capture the transformative experience of the learner, and which is based on the "profound belief"—and I am here echoing the words of Rebecca Chopp, the newly selected President of Swarthmore College—that the highest purpose of higher education is to "transform [the] individual."

A method of assessment that focuses on the experience of the learner can be understood as a phenomenological assessment. Further, all experience involves perception, and phenomenologists agree that all perception involves interpretation; one does not simply receive information in perception. Consequently, a "direct" measure of learning from a phenomenological perspective would involve an analysis of the first-person perspective, and a third-person, objective perspective would be considered derivative or indirect. This is a curious reversal of the common assessment practices promoted by accrediting agencies today that emphasize the use of so-called "direct" measures of learning designed to eliminate the perceptions of the learners.

What kind of innovative assessments can be developed by teachers who are interested in making students more mindful of their own educational experience and hermeneutic imagination? Solloway and Brooks pose a question similar to this and answer by proposing a different model of assessment, one that does not eliminate "the idiosyncrasies of personal relevance, cultural context, and historical context," but rather allows "students to bring their personal histories to the table." The assessment designed by Solloway is a "self-evaluation" assessment of learning, which is claimed to have "demonstrated a texture of mindfulness."

Following this initiative, I have designed what I call "mindful reading assignments" (MRAs) for my philosophy courses. These assignments ask students to (1) identify a passage from an assigned reading that has affected (deepened, qualified, confirmed, raised new questions, etc.) the way they think, and (2) explain the significance of the passage (e.g., its difficulty, originality, insight, truthfulness, etc.) and how their thinking has been affected (deepened, qualified, confirmed, raised new questions, etc.). The focus of this assignment is not on demonstrating knowledge about the content or argument found in a particular text (although this inevitably happens along the way), but rather in demonstrating that one has been open to letting the other (in this case the text) engage oneself, and has been transformed through an interpretation of both oneself and the text. In Gadamerian terms this would exhibit a "kind of play, a back and forth or to and fro movement" that is the unveiling or truth of being, which is not entirely objective (since the focus is not on getting the text right) or entirely subjective (since the focus is not solely on what the student thinks alone). Rather the focus is on the encounter in which the object and subject become merged, and both are transcended in the process, that is, in the experience.

For my SoTL project, my plan is to compare classes which are asked to complete MRAs with those that are not, and to see what, if any, significant differences emerge. My expectation would naturally be that the use of MRAs would lead to an enhanced learning experience that would also result in improved results on other more traditional assessments, such as multiple choice and short answer tests. I am also interested in surveying students to find out which method of assessment they find most valuable, but here I am not sure what to expect. Perhaps students who are used to traditional assessment measures may not think that the MRAs reflect significant learning, and it remains to be seen whether the results will provide “an opening for transformation.”

In any event, I have become more mindful of my own assessment practices as a teacher and more open to letting myself be transformed by the students’ observations. The MRAs have already provided a pedagogical benefit in that they allow students to determine which passages they find significant rather than the ones I (and the tradition I am following) find significant, and when these passages become the focus of our discussion and analysis, or when the students’ reflections provide new questions for their own research papers, it broadens the horizons of us all. Thus I am already starting to realize that using a phenomenological-hermeneutic model of assessment may also provide an opportunity for transformation for the teacher.

MeStories as a Change Agent to Create a Culture of Participatory Learning

Robert Kenny



years in business and industry.

Robert Kenny is an Assistant professor in the Department of Digital Media. His primary scholarly interests lie in teaching and researching media as a change agent, as well as how humans respond to visual imagery. He has published in educational, technology, digital media, and social science journals and has worked extensively in K-12 schools to help define causes for lack of motivation on the part of digital kids for reading. Prior to entering academia, Robert spent over 25

The need for a cultural change:

It is interesting that with all the media attention being paid to the so-called digital generation, many educators seem to fall into the trap of thinking that these students come to already class armed with sufficient skills to effectively participate in their learning. We constantly read about how media-centric students spend so much time learning from videogames and other forms of interactive, informal learning environments, and that they grasp and retain knowledge differently and, as a result, do not relate well in a traditional face-to-face classroom. The truth is that these students may do well in participatory environments in informal learning situations, but they do not always bring these skills to bear in their college classes. Why is it, for example, that students can decipher complex intricacies of playing complex video games without an instruction manual, but they have a hard time following simple direc-

tions from their instructors? Is it because they cannot read? Or is it because they are willing to participate and invest in their learning because the rules of game play allow them to make errors but are willing to do so in their classes because their instructors do not offer this same fail-safe environment? It is true that their avatar might die in a game but there is always a ‘do-over’ and a time for reflection that provides a carefully engineered sense of empowerment that is offered by game developers.

Successful implementation of participatory learning in the classroom depends on faculty integrating these same factors into their instructional strategies. First, instructors must be willing to delegate power to their students to take control of their own learning. This transfer of power is not easy to come by. Many of us have been taught by traditional methods in which their teachers are the ones with the knowledge and it is their job to supply that information to us. Students are empty vessels whose job is to take notes in the so-called ‘lectures’.

A second factor in creating a collaborative learning environment is for the instructor find ways to remove the stigma (and fear) associated with being wrong. Traditional classroom delivery methods tend to reinforce passive behaviors on the part of students who are conditioned to be continually looking to their instructors to present them with knowledge. They are the receivers/consumers of knowledge and not creators. Based on years of conditioning, students fail to develop a sense of self-significance. Most will agree that the most common reason that students are afraid to raise their hands is because they are afraid to be wrong or do not wish to look foolish in front of their peers. These feelings are fostered by negative attributions associated with being wrong. For their part, few instructors call on individuals looking for a wrong answer. The trick is for the instructor to play the role of an improvisational performer who takes and uses whatever answer is being offered and works with it. By interacting with the teacher in this manner, students are empowered to participate (i.e., invest) in the process because the fear of being wrong is removed by the mere fact that their instructor will use all answers provided to steer towards a specific goal.

This same thinking is what has conditioned students to have difficulty believing that they have the power within themselves to effect change in their lives. This learned passivity has a deleterious effect on society as a whole. Helping students to buy into the fact that they can indeed change things is the motivation behind the movement to implement participatory learning practices in the classroom. The trick is to translate the same type of positive outcomes that these students experience in informal environments into formal classroom situations, which will in turn extend beyond the classroom back into the real world they will be inhabiting after they graduate.

Video as an empowerment tool:

John Dewey has been quoted as saying: “An ounce of experience is better than a ton of theory.” It was his position that theory is simply words without experience. Constructivist thinking is based upon this same principle: that learning and thinking are better developed when one uses his or her own eyes, ears, and hands. Experience theory has been at the root of audiovisual education since the beginning. The expression “a picture is worth a thousand words.” might be its slogan. If a still picture is worth a thousand words, then the value of the moving image is incalculable. Those versed in utilizing video as a form of self-expression already know that video

images can express concepts and knowledge that is difficult to explain in words. In fact, recent studies that I have conducted with my colleague, Dr. Glenda Gunter in the College of Education, have shown that video to be a viable alternative to help otherwise reluctant and unmotivated students to read and write. Video is what breaks down the walls between thoughts and the (in)ability of many students to verbalize them. Like any other media developed for that purpose, video becomes a de-facto assistive technology tool for those who are text-averse/handicapped and have a tough time expressing themselves using traditional communication methods. Many are already familiar with educational researchers such as Allan Paivio and others who explored human's capacity for retaining visual inputs that has been reported in the literature. While text processing has been found to be the more efficient means of communicating, people tend to recall for a much longer time that which they have viewed in image form.

All of these concepts point to video and other digital media's ability to aide communication. But their real power derives from the ability for one to share his or her thoughts on a one-to-many basis. Reading and writing, on the other hand, have been called anti-social behavior. Presenting and watching video is a shared one. One who has something to say can get feedback more quickly and simultaneously from a much larger audience. Of the five senses, sight and sound account for 85% of the information we take in, which further demonstrates just how much power video content has and as well as its unlimited potential.

Video is also empowering because it fosters collaboration. Certainly, one can produce, write, direct and edit a video alone but more often production is much more efficient when done as a team effort in which individuals enlist to take on specific functions in the process. Learning how to work in teams is also a crucial element in developing a culture for participatory learning.

Just like with interactive performance and the fail-safe classroom, the key to a successful implementation of this type of project is to assure students that there are no real wrong answers—that whatever creative concept they come up with, as long as it fulfills the requirements of topic, length and output specifications, will not be questioned nor will be their point of view, as long as it is developed and supported with facts and/or demonstration of its effect.

MeStories:

MeStories (<http://mestories.ucf.edu>) is a campus-wide digital video contest aimed at both faculty and students in an attempt to implement a culture of participatory learning. The intent is to inform faculty and to empower students to create a spirit of self-reliance in learning. The context of the video is to expand upon the concept of U-Can-Change-the-Future (UCF) using a personal video narrative in which participants collaborate to demonstrate how they have or can do small things to create change. This year's topic is the environment, in coordination with the UCF Unifying Theme (<http://unifying.ucf.edu>). Modeled after the *Members Project* (<http://www.membersproject.com/>) sponsored by American Express, and the *Change the World at 35,000 Feet* (http://www.weare-whatwedo.org/35000feet/?utm_source=newsletter0802) by Virgin Airways, we utilize a community-based Website to disseminate the information, promote novel ideas, and solicit new ones regarding how individuals can change their world (and the environment, in particular). The videos are produced

in narrative (i.e. story) format and are intended to be personal in nature. It is a well-known fact that story is the oldest and most common means to disseminate information and to teach. Making those stories personal adds to the relevance.

The concept was piloted in the fall of 2008 in Dr. Gunter's graduate technology education course for teachers. Students were assigned the identical project and asked to create their videos. The "Jason Video" currently found on the *MeStories* Website is one of those projects and serves as the exemplary model as to what kind of video is expected. But the videos were not really the entire expected outcome from this assignment. Students were also asked to write reflections on the process of creating their videos. What we found in this exercise is that the real importance of the assignment was the change that took place on the part of the videos' creators. Almost unanimously the reflections indicated that even though they may not at first have seen or understood the point of doing the assignment, participants saw, as a result of producing their videos, the environment and the problem of climate change in an entirely different way. In effect, those producing a video in which they try to convince others to elicit change also changed them. Not only did they realize the 'downstream effect' of how what they do everyday can affect others who are downstream from those actions, but they also learned that even small changes can reap significant effects if those changes are adopted by the masses.

While the videos are an important artifact in this assignment, the real change we were looking for was the personal ones reflected in the students' writings and comments. They learned that participation does count and is meaningful. They also seemed to understand that learning about how small changes can make a difference, regardless of the topic, translates into their being willing to become more involved. This spirit of involvement is at the core of participatory learning and is what will make attempts at implementing constructivist learning in their own classroom.

The future of this project:

The *MeStories* project was first initiated in the spring of 2006, when the topic was "What is it like to be a student in the 21st Century?" It was quite successful and, reading from the responses on the part of the participants, was also a life-changing event. We intend to re-initiate the momentum from our first experiences from 2006 and make this an annual experience.

We also have plans to expand the project. We intend to collaborate with the Faculty Center to create professional development workshops and possibly create a course on participatory learning for students that will be offered through Interdisciplinary Studies. A student/faculty collaborative video project such as *MeStories* will be its catalyst and for dissemination.

The intent is to make this movement the catalyst for sustainable, scalable and systemic cultural change on campus. We believe that such cultural change involves both informal and formal learning. The video format as a product outcome matches well the positive formal and informal learning experiences that will translate and guide us on how to implement the further examples of participatory experiences in the classroom and can serve as a role model for students and faculty to become believers in the process.

Training Teachers in Multiple Environments: Microteaching versus Mixed-Reality

Janet Andreasen and Erhan Selcuk Haciomeroglu



Dr. Janet B. Andreasen is a Visiting Assistant Professor in the Department of Teaching and Learning Principles in the College of Education. She works with prospective middle and high school mathematics teachers. Her research interests include examining mathematical knowledge for teaching and the integration of technology into mathematics teaching and learning.



Erhan Selcuk Haciomeroglu is an Assistant Professor from the Department of Teaching and Learning Principles. He teaches graduate and undergraduate courses in the Mathematics Education program. His research interests include the role of visualization and representations in the teaching and learning of calculus.

The role of microteaching in preparing prospective teachers has been widely recognized within the mathematics education community. Research studies focusing on the preparation of prospective teachers of mathematics suggest that participating in microteaching may not provide a learning environment of an actual classroom because students tend to focus on the strengths of the lesson and do not provide the quality of feedback. This study examines the merits of microteaching and TeachME—an innovative mixed-reality environment for teacher training—in teacher education programs and extends previous studies by enhancing microteaching methodology and proposes an alternative preparation process through the use of the mixed-reality environment.

Data were collected in a semester-long methods course for prospective mathematics teachers. The prospective teachers were randomly divided into 10 groups which were then randomly assigned to microteaching or mixed-reality environments. All groups wrote lessons for the same problem which they had solved in class. In order to imitate an actual classroom environment and deepen the prospective teachers' thinking about various solutions to the problem, eleven correct, incorrect, and incomplete student work samples for the problem were created. All groups received the same work samples in each teaching cycle. In the microteaching groups, one prospective teacher implemented the lesson with the other two group members playing the role of students. In the mixed-reality environment, one prospective teacher taught the lesson to five virtual students while the other group members observed and took notes. During mixed-reality teaching sessions, an interactor behind the scenes acted for all five virtual students. All sessions were videotaped. After each teaching session, each group member wrote a reflection. During the next class session, the groups watched their own videos, reflected on their teaching, and revised their lesson plans in preparation for the next cycle of teaching.

In conducting this study, we sought to explore how the prospective teachers' knowledge and perspectives evolved as a result of teaching in two different environments. In both instances, the teachers were required to make sense of student work and to teach a lesson dealing with a non-linear algebraic pattern. As microteaching groups attempted to revise and improve lessons for ideal students, they mainly discussed how to interpret and respond to unexpected student work and guide the ideal students to correct answers. On the other hand, mixed-reality groups discussed how to accommodate the diversity of students and how to manage the class while teaching the content to actual students. Moreover, they developed

strategies to engage students in solving the problem.

In the microteaching environment, the “students” were helpful and respectful. This environment provided for a “safe” environment for prospective teachers to practice delivery of content. The students were ideal, respectful, friendly, overly helpful, highly motivated, and didn't doubt the teacher's decisions or question his/her authority. This provides for a somewhat manufactured delivery of content, which, however, can be important in honing skills in delivery of content. By contrast, the mixed-reality teaching environment, TeachME, the students were real, sometimes disrespectful, unmotivated, and unenthusiastic. The teacher could not rely on anyone but him/herself for delivery of content and the added component of behavior management, even on a small scale, provided for an enhanced and realistic environment for learning to teach, particularly with aspects of management of behavior.

We conclude that there are potentialities in TeachME for not only deepening content knowledge, but also for developing behavior management strategies. The mixed-reality teaching environment sharply differs from the microteaching environment. The former, rather than teaching content, focuses on managing student behavior. This is by no means to say that microteaching is not useful in teacher training, but rather that we as teacher educators must see the weaknesses and strengths of the teaching to their peers in groups and find ways to enrich student teaching experience. Moreover, we argue that the realistic aspects of the mixed-reality environment can, in fact, enhance prospective teachers' preparation for classrooms, particularly in urban schools. The incorporation of the mixed-reality in complement to the microteaching provides for multiple experiences which can focus on both mastery of content and its delivery as well as behavior management strategies which can be effective in schools.

Submissions

The *Faculty Focus* is a publication for all instructors at the University of Central Florida. This includes full-time and part-time faculty and teaching assistants at all UCF campuses. Its purpose is to provide an exchange of ideas on teaching and learning for the university's community of teachers and scholars. It is envisioned that this publication will inspire more dialogue among faculty whether in hallway discussions, departmental meetings, or in written articles. This represents an opportunity for faculty to reach their peers throughout the growing UCF community. The *Faculty Focus* invites you to contribute your ideas on teaching and learning in a short essay.

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