The Intersection of Arts Programming and Teaching and Learning:
Creative Thinking

by Julie Dalley

In a studio classroom, 12 students sit in a circle, look around themselves and at each other, and peer curiously at a gang of course instructors milling about the room. They are the inaugural class members of Creative Thinking, an experimental new course offered at Montclair State University designed to generate unique opportunities for students to explore how creativity happens. Their instructors, led by Dr. Ashwin Vaidya, a physicist, included Dr. Mika Munakata of Mathematical Sciences, Dr. Tiger Roholt of Philosophy and Religion, Dr. Marissa Silverman of the John J. Cali School of Music, Dr. Debbie Saivetz of Theatre and Dance, Dr. Jerry Fails of Computer Science and Dr. Yawei Wang of Marketing. The students will spend the next four weeks immersed in exploring their own creative abilities, perspectives and approaches.

The students were exposed to multiple approaches to creative processes. They observed rehearsals for the opera, *Zinnias: The Life of Clementine Hunter*, directed by Robert Wilson. They spoke with the visionary stage director, asked him questions about inspiration, structure, design and practice. They participated in a two-day workshop with choreographer and MacArthur Fellow Liz Lerman. Lerman led them through a series of simple movement and naming exercises designed to focus awareness on their own thinking patterns—a process she called “harvesting.” They spent two class sessions with artist and visiting professor Iain Kerr, called “Worldmaking.” They discussed creativity from the perspective of the individual’s role as part of a collaborative process within a system, to dispel the idea that creativity is a mysterious, intangible element.

Though the ability to interact with creative artists—brought to campus as part of the Peak Performances series programmed by Arts and Cultural Programming (ACP)—and explore artistic processes was critical to the course design, the students went far beyond artistic expression. Under the guidance of their seven instructors, they played logic games; wrote and acted out stories about themselves; discussed, debated and learned to speculate solutions to complex conceptual problems; tested out approaches; and reflected on and journaled their thoughts and ideas. They conceived of and probed their own interests, how new perspectives could challenge their ingrained or habitual approaches to problem solving or course...Continued on page 2
Creativity Research and Scholarship

Researchers at Harvard and Vanderbilt have identified “latent” types of creative environments for students that move beyond the conventions of creative thinking that are measured and judged in a series of other popular creativity frameworks. Nurturing, Idealistic, Renaissance, Social Media and Gregarious creativities.

Student narratives were collected and analyzed to determine when students—often unknowingly—perceived their own creative contributions to campus life, including hanging out with friends, working in a student organization, volunteering and other routine aspects of campus life. These findings suggest that students can be encouraged to build awareness of what environments best foster their creative thinking, how they can make connections to these environments through their course work and how scholars and students can “refocus attention from the intellectual rewards of the classroom toward the creative management of students’ extracurricular lives.”

Elizabeth Long Ling and Stephen J. Tepper of Vanderbilt wrote in 2010 about the rising consciousness yet fragmented approach in higher education creativity can bring and learning, stating in the Chronicle of Higher Education article, “The creative turn in higher education, however, remains only a series of ad hoc experiments.” Still, researchers are claiming creativity, or something like it, can be measured, and some creative campus programs are leveraging this research, which suggests that creativity is, “rooted in a set of teachable competencies, which include idea generation, improvisation, metaphorical and analogical reasoning, divergent thinking that explores many possible solutions, counterfactual reasoning, and synthesis of competing solutions. Creativity also requires an ability to combine and persuade, and the skills and leadership to apply diverse and specialized expertise.”

Despite a renewed focus on what conditions in teaching and learning can foster creativity, what makes us creative and how we identify creative thinking is a question that has burned from the new cultural consciousness for a long time. Maria Popova’s blog Brainpickings is an example of a public resource devoted to culling creative ideas and thinkers throughout history. Recently featured in The New York Times as a “big thinker,” Popova’s blog has generated a large readership simply by aggregating forgotten or misplaced gems from the best thinkers in our global history.

The Association of Performing Arts Presenters recently released a new white paper detailing the outlook for all their Creative Campus Innovations grant recipients. The paper serves as a means of furthering the dialogue on how arts programming and teaching, and learning can merge on campus to profoundly impact student learning and creativity. The paper is balanced in its recognition of the challenges both artists and instructors face when trying to integrate interdisciplinary projects and programs on campus: “Burdens, facilities, selection processes, and professional norms all work against innovative programming that places other goals (learning, engagement, conversation, community building) above more narrowly conceived notions of curatorial excellence. Furthermore, institutional structures and academic practices, from tenure to course review and scheduling and budgetary silos, also discourage faculty and other campus partners from embracing arts-based interdisciplinary inquiry.”

However, the paper goes on to discuss the unique value of collaboration with performing arts presenters on campus, because they often, "create what scholars call “territory”—spaces where people can exchange ideas and learn from one another, without the same external pressures tied to extrinsic rewards and strict disciplinary practices. The arts contribute to these trading zones in unique ways—they build “play” and improvisation into the creative process; they embrace ambiguity and uncertainty; they use story and metaphor to produce mutual understanding and bridge cultural differences. Moreover, artists are often project driven rather than discipline driven and process oriented rather than product oriented.”

The authors make the argument that arts programming can be an essential and critical part of infusing courses and campus communities with an appreciation and discourse on creativity and its many forms. It’s well worth reading the full report, available at appac365.org/KNOWLEDGE/SeminarDocuments/CreativeCampusWhitePaperwExecSum.pdf.

Assignment: Creativity Research and Scholarship...Continued on page 4
As the current lead instructor of Creative Thinking, Iain Kerr brings a set of skills and experience based on his broad history of tackling creative problem solving in his own research and work. Trained in philosophy and architecture, Kerr is a core member of, and works concurrently with, spund([1], a collective of consultants who bring a range of expertise and experience—as architects, ecologists, philosophers, musicians, urban designers, educators, skateboarders and much more—to tackle ecological questions with new methods that stress eccentric trigger points, non-linear pathways, emergent answers that exceed the participants pre-existing knowledge and the building of new symbiotic relationships between people, technologies, ecologies and other critters. Kerr’s experience with spund has given him “a place to test how creativity works in the real world,” which developed out of his philosophical training in metaphysics that understands, as he says, “creativity is a quality of reality. Once we step outside of our heads and enter into the world in novel ways—astonishing things can start to happen.”

Kerr approaches the idea of whether we can teach creativity by getting students to experiment with and understand what creativity can be: the movement from novelty to sustainable innovation, that is, an idea that can teach creativity by getting students to experiment with and understand what is good, important and to allow a process to push the received ideas of what is good, important and to allow a process to push. Kerr approaches the idea of whether we can teach creativity by getting students to experiment with and understand what is good, important and to allow a process to push the received ideas of what is good, important and to allow a process to push the received ideas of what is good, important and to allow a process to push...
I n reconsidering the effectiveness of this typical script in any beginning physics course, it strikes us that while the standard practice of conveying scientific information may work for the scientifically gifted and motivated student, it leaves behind the majority of the already scientifically alienated.

Some institutions have made a deliberate attempt at revamping their curricula; traditional lecture-style teaching has been replaced by inquiry-based teaching, often encouraging students to fully engage in the scientific process. Others have proposed refocusing introductory science courses to reflect two aims: promote conceptual understanding and showcase the process of scientific inquiry (Meinwald & Hildebrand, 2011). These aims can be achieved by making courses student-centered and encouraging exploration and dialogue (see DeHaan (11)). Yet another way we propose is to engage STEM students in activities that merge science with creativity.

Not so long ago, we administered a survey to 200 MSU undergraduates and graduate students of science and mathematics students (Munakata and Vaidya, 2012). The aim of the survey was to assess students’ perceptions of the role of creativity in the sciences. The questionnaire, using a Likert-scale measurement from 1 to 5, asked students to indicate the degree to which various disciplines encouraged creativity. It first asked students to describe the most creative activity they had engaged in and to compare various disciplines, events and skills against their standard of creativity. Our data (Figure 1) revealed that even among science and mathematics students, arts-related disciplines were deemed to be more creative than sciences. Further, among the science disciplines, those that were more applied (medicine, engineering, physics) were rated as being more creative than the theory-based disciplines. The somewhat favorable ratings received by these scientific disciplines may not be random or coincidental; several of the students taking the survey were aspiring medical students and enrolled in a physics course taught by one of the authors. These results were also confirmed by other sections of the survey that asked students to describe the most creative activity they have engaged in. The results clearly illustrate the perception that creativity does not play a role in scientific and mathematical endeavors.

Though the results of this survey are not surprising, they are nevertheless disturbing to the science educator and pose a challenge for those of us who encourage our students to be innovative and try to equip them with the tools necessary towards this accomplishment. If we strive to engage students in science in the same way that a scientist approaches it—that is, creatively—it is imperative that we expose students to opportunities to engage in the creative process early on during their education. This is not so easy. Unfortunately, creativity and imagination are seldom emphasized in STEM learning (NRC, 2005) with rote and dry instructional practices often leading to students dropping out of STEM fields. (Goldberg, 2008). By and large, students, especially in introductory courses, are taught by lecture and their laboratory experiments are usually predetermined. This may be the case in other disciplines as well.

Figure 1: Creativity ratings for different disciplines by CSAM students

The Art of Science experiments

The Art of Science Project: We recently initiated an experiment in our classroom with the help of a grant from the American Physical Society. The project, which began in the fall of 2012, involves undergraduate physics and arts students in the exploration and development of a hand crank camera and in the subsequent production of sustainability-themed short movies. This innovative activity, or performance, will capitalize on the public’s passion for movies. The moving image occupies an increasingly demanding place in contemporary life. The amount of energy spent on both the production and consumption of media nowadays is enormous; cinema itself, however, was born of modest mechanical means. Just over a century ago, hand-cranked cameras and bioscopes harnessed human energy to present the visual illusions that still hold our attentions today. This project is a collaboration between the disciplines of physics and art at MSU and is being conducted with the collaboration of faculty and artists from across and outside the campus with the hope of bringing the playful side of science to the forefront of the student consciousness. The project is being conducted in three distinct phases:

1) Figures 3-9: An overview of sustainability-themed short movies and a look at the process involved from the initial idea to the final product. Through our collaboration, we hope to stimulate the student consciousness. The project is being conducted with the collaboration of faculty and artists from across and outside the campus with the hope of bringing the playful side of science to the forefront of the student consciousness. The project is being conducted in three distinct phases:

Figure 2: Overview of sustainability-themed short movies

2) Figures 3-9: A look at the process involved from the initial idea to the final product. Through our collaboration, we hope to stimulate the student consciousness.

3) Figures 3-9: A look at the process involved from the initial idea to the final product. Through our collaboration, we hope to stimulate the student consciousness.

Spotlight on Practice

The Art of Science Project. We recently initiated an experiment in our classroom with the help of a grant from the American Physical Society. The project, which began in the fall of 2012, involves undergraduate physics and arts students in the exploration and development of a hand crank camera and in the subsequent production of sustainability-themed short movies. This innovative activity, or performance, will capitalize on the public’s passion for movies. The moving image occupies an increasingly demanding place in contemporary life. The amount of energy spent on both the production and consumption of media nowadays is enormous; cinema itself, however, was born of modest mechanical means. Just over a century ago, hand-cranked cameras and bioscopes harnessed human energy to present the visual illusions that still hold our attentions today. This project is a collaboration between the disciplines of physics and art at MSU and is being conducted with the collaboration of faculty and artists from across and outside the campus with the hope of bringing the playful side of science to the forefront of the student consciousness. The project is being conducted in three distinct phases:

1) Figures 3-9: An overview of sustainability-themed short movies and a look at the process involved from the initial idea to the final product. Through our collaboration, we hope to stimulate the student consciousness. The project is being conducted with the collaboration of faculty and artists from across and outside the campus with the hope of bringing the playful side of science to the forefront of the student consciousness. The project is being conducted in three distinct phases:

2) Figures 3-9: A look at the process involved from the initial idea to the final product. Through our collaboration, we hope to stimulate the student consciousness.

3) Figures 3-9: A look at the process involved from the initial idea to the final product. Through our collaboration, we hope to stimulate the student consciousness.

To read more about Kerr’s work in the course and with students, visit the class blog at postcardsfromcreative-thinking.
Students from CSAM are asked to submit photographs and to identify and elaborate on the science behind the art. These are mounted on posters and showcased during the exhibition. In all, more than 100 photographs have been submitted to date. Each year, a group of faculty from CSAM and CART award prizes to three student photographers.

The idea behind the events of the day are twofold: the art exhibition which is student-oriented gives the students a chance to participate in an art-science creation and get the audience in the right frame of mind to discuss the deep connections between art and science, and to reveal the sciences as a very creative enterprise. In the true sense of creativity, these events provide the opportunity for students to shift their paradigms about the nature of science learning. More often than not, we found the students pleasantly surprised to find physics hidden in the pictures that they took.

Reactions to these events:

We are in the process of assessing the impact of these events on students’ perceptions of the role of creativity in the sciences. Our hope is to distinguish the effective elements of these types of activities to share with STEM colleagues.

Conversations and the general public mood during the physics and art event clearly indicated excitement over the photographs and appreciation for the theme of the day.

Students in the upper level physics classes were asked for reflections on their experiences with the Art of Making Science project and their classroom experience.

Students recognized that the structure of the course was different from the typical day-long science laboratory exercises. They commented that the ongoing nature of the project provided incentive to prepare between class meetings and also stated that as opposed to the question-and-answer structure that is common in other classes, this class was open-ended and allowed for the student to ask their own questions and to try to formulate answers to them. One student saw this as good preparation for science after graduation, when textbooks won’t be available to provide answers.

Students also enjoyed the teamwork aspect of the project. They learned how to work on their own piece of the project while keeping in mind. Teamwork allowed them to combine their knowledge and to share ideas. For example, some in the group were “better with their hands” while others had “deeper theoretical knowledge.” Although some alluded to different starting points within the group, groups were able to find their rhythm and learn to communicate efficiently and effectively. Students enjoyed that they got to know each other well due to the focused time they spent outside of class.

The importance of such experiments and informal events cannot be underestimated. They can be extremely beneficial in conveying essential ideas which might be difficult in the traditional classroom due to pressures associated with grades. Additionally, even the elementary mathematical treatments of topics in physics is seen by many students as being very burdensome due to previously instilled fears about mathematics and science. Our experiments have proved to be a revelation to students and faculty alike; it has allowed us to provide a forum where talking about science and creating science are both possible and equally valued. It has allowed students to see that science and in fact, even art, are not created in isolation; there is a strong tie between them that often goes unnoticed. In becoming comfortable with failure, we have given ourselves a greater chance of success. The roots of the notion of creativity lie in creation, after all, and our collective consciousness have been shaped by our students’ creation. As our project races to completion with the creation of the short films, we look forward to more shifts in our thinking of what science or art really mean. We invite you to join us for the culmination of this experience on May 3.

References:

Figure 2: Students working on a simple hand crank mechanism
Performing Arts as Pedagogy

by Christopher Parker

Part of my Classical Mythology course requires students to attend a live dramatic or artistic performance. Not only are my students benefiting from the rich mythology themes often present in live performance, but most theater offerings and arts performances are rich with conceptual undertones of psychology, language, literature, physics, biology, technology, history, religion, philosophy and mathematics. I think it is clear how psychology, language and literature are present in drama. It takes a deeper analysis, but one can analyze performances for the elements of physics in narrative—such as I demonstrate in some of the examples below—as well as the actual physical science used in choreography, sound and special effects. Performing arts allow for analyzing biology, not only for performances that incorporate biology in the narrative, but also by scrutiny of the bodies of the dancers, musicians and actors as well as in the imagery present in scirnnis. Math is present in the meter of poetry (cf. Birken, M., Coon, A. C. (2008). Discovering patterns in mathematics and other deities of war and conflict. Act I, which features a re-creation of ancient Rome called “Insula.”

To connect more modern narratives to classical mythology, we explored the myth of Arachne and the archetype of the tragic hero. Regarding the Son of God,” from the Italian directors, performing artists, producers, etc.). We also may read some of the original sources of the theater piece. The syllabus clearly articulates the expected participation in live performances, and lays out what students can expect tied to the course learning goals.

Examples of Campus Arts and Cultural Programming

Most recently, two of my Mythology classes attended “On the Concept of the Face: Regarding the Son of God,” from the Italian company Societas Raffaello Sanzio. More than 60 Mythology students from two classes were given the opportunity to meet with the director, Romeo Castellucci, earlier in the day of our chosen showtime. Then, directly before the performance, all my students and other guests were invited to a pre-show conversation with scholar Annelisa Sacchi, a Post-Doctoral Fellow in the Department of Romance Languages and Literatures, Harvard University. This helped us to pre-prepare by understanding the context of the creation of the show and a scholarly approach to analyzing its meaning. These pre-show experiences develop an entire aesthetic: creation of the show and a scholarly approach to analyzing its meaning.

Other examples of performances have been:

- **Sweeney Todd**, which features a classic tragic hero.
- **In 2003, a re-creation of One Thousand and One Nights, a collection of myths and folk legends from Arabian antiquity**
- **Prometheus-Landscape 2**, a wild modern interpretation of the behaviors and personalities of the Greek gods
- **Roan Woman, directly applicable to our course work**, and performed using several languages (subtitled in English)
- **Kiss of the Spider Woman**, linked to the myth of Arachne and the archetype of the classic Greek tragic hero

But, while we were lucky to have such relevant performance pieces to choose from—directly tied to classical mythology—not all arts events are classic theater. For instance, one semester a dance event coproduced by Peak Performances and Liz Lerman, called The Matter of Origins, told an interpretative story of the Manhattan Project and the development of the nuclear bomb. To connect more modern narratives with classical mythology, we explored the connections between this dance and the story of Prometheus, the end of the world and other themes of war and conflict. Act Two invited the audience on stage for a re-creation of Insula, a dance-media-music-theater piece
devoted to the concept of the Face. As we study archetypes in other cultural or ethnic mythology and how they are, in fact, related by similar archetypes.

**Pedagogy of Arts and Cultural Programming and the Class Subject Matter**

The Review: A week before any performance I will give a workshop on how to write a play review. I am a regular reader of the arts critics of The New York Times and other newspaper’s theater critics, and over the years I have developed a basic format for how to structure a theater review. I give these format directions to the students and we read aloud a very recent theater review from a newspaper. We analyze the correlation between a recent review and our basic format. Reviews on the Internet tend to be different in style. And even though the Internet form of writing contributes...

...Continued on page 12
But learning and practicing critical questioning takes some consideration and thought. We evoke these thoughts in small communities of inquiry with the goal of developing a pool of questions to ask our artists. We experiment with Socratic questioning, and its relationship to Greek mythology and other Greek philosophers and their methods of examining knowledge. Each small team then assigns one or two members to actually present their questions during our conversations with the artists.

Original Sources: In many cases, we will review the original sources from which theater has emerged, such as the short story “Dog Days” which inspired the creation of a new opera piece co-produced at Montclair State, also called “Dog Days.” “Dog Days” is apocalyptic, which is a common theme in Greek and other mythologies. The show also explores the animal in the man and the feminine power of the heroine. Reading the short story that inspired the opera helped us develop valuable questions for the librettist and director, understand the narrative of the opera, and the meaning of the musical score itself.

My more than 10 years of experience working with artists on campus has enriched my pedagogical approach to teaching and learning. Infusing my courses with live performance experiences gives students a chance to find the relevance to the classical archetypes, evokes an enthusiastic desire for philosophical inquiry and critical thinking, builds (literally) critical writing skills, gives practical useful reasons for research on mythology or any subject, fosters public inquiry and speaking, and enriches the connection of the modern aesthetic with the literature of the past.

The point here is for us to experience the presence of ancient myth, or almost any class topic, through the artists of our time. In this way concepts cease to be old stories in old books and something we live now. I ask the students to embrace this and recognize it and learn better by actually experiencing mythology in the world of successful and talented artists, including their peers.

Quick (boring) facts: “Screencasting” is recording all or part of what’s happening on a computer’s display, to share with someone at a later date. It’s often used in software tutorials to give new users a visual aid to help familiarize them with the software. There are many different packages out there that can record screencasts, but I’ll be writing about a free service called “Jing” (techsmith.com/jing). Jing allows you to record a whole screen, a window, or a user-defined portion of a screen. It records up to 5 minutes of 10-frames-per-second video (so, not good for actual video, but just fine for showing movie movements, etc.) and allows you to save them locally as self (flash) video files, or host them on screencast.com. (Techsmith also offers “Snagit,” which records more than 5 minutes and adds features, and Camtasia, an even more feature-filled screen-capture and video creator package.) Jing works on Windows (all contemporary versions) and Mac OS X 10.6.8 or later.

How I use it: As with all teachers, I am constantly trying to find ways to improve communication with my students, and give them more effective feedback on their work—especially written work. And, of course, I’m lazy; I’d like to do it efficiently. (I’m also not the fastest typist, so I find that while typed feedback is an improvement over handwriting, it’s still very time consuming.) I do use rubrics or other ‘pre-made’ commentary for general or common feedback, but that just doesn’t cut it when you find something that doesn’t fit the categories you defined before reading student work. I also find that I’m not good at conveying nuance in my comments—students find it difficult to distinguish ‘minor’ comments or asides from central, fundamental feedback about their work.

...Continued from page 11

...Continued on page 14
commentary from me. (You can see times when I do that in the example screencasts, as my mouse flicks down to the left where the pause button is located outside the recording frame.) Sometimes it takes two or even three five-minute videos to read and respond to an entire paper, but it if it’s one-page, one video does the trick. Then, just a brief typewritten summary at the end of the paper (mostly to remind myself of the evaluation I just gave in video form) and it’s returned to the student with a link to the screencast. (Total video time is more than just the five-minute video that’s produced.) If you screw up something or get interrupted, Jing doesn’t let you edit—you have to start over. But generally I get videos done in a single take, with only a few minutes of paused reading time, so a five-minute video might take 6-10 minutes to produce.)

Here is an example of a short essay that took me two five-minute videos to read: screencast.com/VTqSmc=9B and screencast.com/VNlStw16bJ.

But essays aren’t the only student work that visual and verbal feedback can help with. I use screencasts in a critical thinking/informal logic course, where students have to do things like reconstruct an argument into a structured format for analysis. There are many moving parts, and it’s a nightmare to give good feedback just by typing, as your focus shifts from premise to premise as you critique their work. Another benefit: it’s easy to post screencast links as part of a discussion thread, and other students can easily follow along and benefit, too. Here’s an example: screencast.com/6MsOu0515.

How do students respond? I haven’t done a formal study, so all I have are anecdotes which are generally very positive. I’ve had students describe it as having me “read their paper over their shoulders.” Yes, I thought that sounded creepy too, but they intended it as an endorsement. I find that students can understand me better, as they can hear my tone and emphasis. They can also replay the video whenever they want. (Another underappreciated benefit, in my view, is that they have to listen to the whole thing to understand my evaluation—they can’t skip to the end or just find “the grade” to see what I thought of the paper.) Like any assignment and feedback, what you put in a Jing screencast is only as good as your feedback, and the structure of your assignment. I typically assign papers that can be revised and resubmitted; students have a good motive to listen to my feedback in that case (whether it was a Jing, or not). I also find that students have fewer misunderstandings about what I’m referring to in my feedback—some errors or problems can’t be easily located using a pen on paper (arrows, circles, everywhere!) but with a Jing, you can see they draw or scroll to the areas you’re focused on. (See the logic screencast above for a good example of that.) I used to screencast on a convertible tablet, using a pen to scribble on documents as I read and talked (awesome); now I have a plain laptop, and I can indicate passages clearly just by moving the mouse (great, not awesome).

I do also use Jing to screencast tutorials; if you’ve ever had students complain they don’t know where to find something on Blackboard, use a screencast to answer that once, then post it somewhere you know they can find it. I also run an off-campus hosted wiki as a coursework site for students; Jing’s ease the learning curve, since it’s something they’ve never done before. (It’s a unique type of wiki.) Here’s an example: screencast.com/OFUqQYfQgM.

About the author:
Kirk McDermid is an assistant professor of philosophy at Montclair State University. As a philosopher and physical biologist (BS in physics from Oberlin, MS and PhD in philosophy from the London School of Economics and the University of Western Ontario, respectively) interested in the philosophy of science and epistemology, he also publishes in Physics Letters A, Religious Studies and Teaching Philosophy. He is also associate faculty at Royal Palm University in Victoria, British Columbia, Canada. He teaching a course on critical thinking for Justice Studies students with a law enforcement elective. He is always interested in exploring innovative pedagogy and instructional technology as ways to increase student engagement and make (often complex) student-driven learning manageable for instructors. This current research interests center on developing an epistemology of student plagiarism, examining the philosophical impact of various methods in physics, and implementing a semantic wiki to manage student learning and collaboration.

News In Brief

Dr. David Lee Keiser and Research Academy Receive Contemplative Pedagogy Grant
The Research Academy for University Learning, in partnership with Montclair State Department of Curriculum and Teaching faculty member Dr. David Lee Keiser, is pleased to announce a recent Contemplative Mind-1,440 Teaching and Learning Center Grant award of $5000. The grant is funded by the Center for Contemplative Mind in Society to fund projects and programs that develop and promote contemplative pedagogy practices on campus in collaboration with a teaching and learning center. The award grant will be used for the Contemplative Pedagogy and Practice (CPP) Faculty Fellows Program, an experiential pilot program that selects six faculty members to participate as Fellows to redesign their courses integrating contemplative and mindful learning research and practices. The Fellows will be engaged through specialized workshops, guest speaker events, and leveraging emerging research in the field of contemplative and mindful pedagogy. The grant period runs through Spring 2013 and will lead to an entrenched year-long program that mirrors the Research Academy’s Engaged Teaching Fellows Program, by offering yearlong fellowships for faculty looking to integrate contemplative and mindful learning practices and research in their course design.

Research Academy and CSAM Research Team Secure New NSF Grant to Fund Research on Innovative Science Teaching and Learning
Dr. Nina Goodey, associate professor of Chemistry and Biochemistry, Dr. John Sietske, director of the Sokol Institute for Pharmaceutical Life Sciences, Dr. James Dyer, associate professor of Chemistry and Biochemistry, and Dr. Cigdem Talgar, acting director of the Research Academy for University Learning, have been awarded a NSF-TUES grant (DUE 1245630) ($166,475) titled “Incorporation of Research Skills into the Undergraduate Biochemistry Curriculum to Create Extraordinary Scientists for the Modern Research Environment.” The grant will provide the support to fundamentally transform the existing biochemistry laboratory curriculum at Montclair State to create education environments that simulate research and produce extraordinary scientists for the modern research environment. The effects of inquiry learning in biochemistry laboratory and the role of an advisory council in this process will be evaluated on ability to design experiments and critical thinking. The grant will run until January of 2016.

The Intersection of Science and Art: Special Series and Interdisciplinary Research Project Presented at the 4th Annual University Teaching and Learning Showcase—May 3, 2013
Hand Span Tales: At the Crossroads of Creativity and Sustainability in Art and Science
handspan tales.wordpress.com

Anuj Vidyas is an artist-in-residence on the MSU campus this Spring 2013. He is developing a short performance film installation (10-15 mins.) around the theme of ecology in mythology in collaboration with students from various programs including physics, mythology, creative writing, film, performance, music and fashion design.

The piece imagines a conversation between Sita, Gaia, and Lowt—three embodiments of the earth in three different mythological traditions (Indian, Greek and Native American)—who come together to assess the violence enacted upon their bodies in this time of ecological crisis.

In keeping with the ecological theme, the project will be created and exhibited without the use of any electricity instead, all parts of the project will be human powered: hand-crank mechanisms will power our video and audio recording devices, and bicycles will power the monitors that we screen the films on both developed by Prof. Ashwin Vidyas and his students in the physics department; the background score and dialogue will be performed live by musicians and performers.

The final project will be performed/ exhibited in various sites across the campus in early May, culminating at the University Learning and Teaching Showcase that will take place on May 3. Parts of the project will be shown at an ongoing exhibit on art and science at the Liberty Science Center, and through a blog site (developed by the artist) that will be showcased on the Creative Research Center website.

These projects will serve to highlight both the interaction of art and science as conduits to creative and diverse conceptual development in the classroom, as well as the positive influence and effect of art and science as models of disciplinary and academic instructional collaborations. As well as visiting professor and artist-in-residence Anju Vidyas, Ashwin Vidyas worked in collaboration with Dr. Mika Mukunaka, Mathematical Science; Dr. Alex Lykidis, Film Studies; and Dr. Joanna Madtich, Classics and General Humanities to bring together students and art pieces from film, the sciences, and the humanities with the goal of showing the intersection of science and art as a pedagogical tool and as a means to leverage technology for visual and rhetorical instruction in creativity. For a full list of all the participants, please visit: handspan tales.wordpress.com/participants

Visual Elements: Guest speaker Felipe Framk will lead a pilot presentation on showcasing scientific data in visually strategic ways, as a means to communicate scientific data to a broader community, with a discussion on the visual elements of science and how scientists can leverage technology for visual and rhetorical impact when presenting their work. Her lecture will be based on her new book, Visual Strategies: A Practical Guide to Graphics for Scientists and Engineers (Yale U.P, 2012).

Dr. Neil Baldwin, (neilbaldwinbooks.com), professor, Theatre and Dance, and director of the Creative Research Center, will serve as rapporteur for the day’s proceedings; his essay will be published in mid-May 2013 at blogs.montclair.edu/crdirector.

...Continued on back
**Submission guidelines**

To submit an article or essay for publication, please send a one-paragraph prospectus to Julie Dalley at dalleyj@mail.montclair.edu or a complete manuscript ready for publication.

We welcome a variety of submissions that address the many topics that can be found concerning higher education teaching and learning, and encourage you to write and discuss your experiences, practices, research and emerging scholarship. We print essays, articles, book reviews and research summaries. We do accept certain items that have already been published, with the proper permissions included with the submission. All essays and articles should be a maximum of 2200 words, including a brief bio of the author and a complete list of works cited. We reserve the right to accept or decline to publish any one piece based on our publishing policies and criteria; however, you don't know if you don't submit, so please share.

**Announcing the Launch of New Peer-Review, Open-Source Online Journal**

Emerging Learning Design is proud to announce the new Journal of Emerging Learning Design (ELDJ). This journal is an outgrowth of the annual Emerging Learning Design Conference, which makes its home at Montclair State University. The journal will present best practices in technology design and implementation by offering articles that propose or review how technology can further enhance the pedagogy of engaging and dynamic approaches to learning. The inaugural issue of this journal will be released in April 2013 with the ensuing issue being made up of proceedings from the ELD Conference this year on June 7, 2013. The journal's editor-in-chief is Cigdem Penpeci Talgar, acting director of the Research Academy for University Learning and the managing editor is AJ Kelton, director of emerging and instructional technology for the College of Humanities and Social Sciences, both at Montclair State. The advisory board also includes Sharon Favaro, assistant professor and digital services librarian at Seton Hall University and Mary Mallery, associate dean for library services and technical services at Montclair State.

**Upcoming Events:**

May 3, 2013—Fourth Annual University Teaching and Learning Showcase
University Hall—various locations

montclair.edu/academy