Strategic Educational Technology Summit

Technology and Liberal Arts
Emerging Uses of Technology in Teaching and Research at CMC

Friday, April 11, 2014
9:00 A.M. – 4:00 P.M.

Location
Marian Miner Cook Athenaeum (morning sessions)
Kravis Center and Roberts North Classrooms (afternoon sessions)
Strategic Educational Technology Summit
Friday, April 11, 2014
9:00 a.m. – 4:00 p.m.

Morning Sessions: Security Pacific Dining Room, Marian Miner Cook Athenaeum
Afternoon Sessions: Roberts North 12 & Kravis Center Freeberg Forum/LC62
Afternoon Technology Open House: Kravis Center/LC63

8:30 – 9:00 Continental Breakfast (Security Pacific Dining Room)

Summit Opening Session (Security Pacific Dining Room)
9:00 – 9:10 President Hiram Chodosh and Dean Nick Warner – “Strategizing Educational Technology at CMC”

Innovative Technology Presentations (Security Pacific Dining Room)
9:10 – 9:30 Session 1: Prof. Dan Michon – “Digital Humanities”
10:00 – 10:20 Session 3: Prof. Manfred Keil – “Flipped Classroom”
10:20 – 10:30 Refreshment Break (Security Pacific Dining Room)
10:30 – 10:50 Session 4: Prof. Deanna Needell & Prof. Mark Huber – “Using Instructional Videos In and Out of the Classroom”
10:55 – 11:15 Session 5: Prof. Piercarlo Valdesolo – “Social Media in the Classroom”
11:40 – 12:50 Luncheon Buffet and Collaborative Program

Faculty Technology Open House (LC63)
1:00 – 2:45 Poster Sessions; Technology Demonstrations; Talk to Instructional Technologists; Vote for Your Technology Preferences; Help Determine Future Technology for Faculty.

Teaching with Technology Workshop Sessions (RN12)
1:00 – 1:25 Workshop 1: Prof. Mark Huber & Prof. Deanna Needell – “Using Instructional Videos In and Out of the Classroom”
2:00 – 2:25 Workshop 3: Prof. Piercarlo Valdesolo – “Social Media in the Classroom”
2:30 – 2:45 Refreshment Break (Kravis Lower Court Breezeway)

Innovative Technology Presentations (Freeberg Forum/LC62)
2:45 – 3:05 Session 7: Dir. Mike Sutton and other Athletics Faculty – “Economies of Technology – Using Technology to get More for Less”
3:10 – 3:30 Session 8: Prof. Audrey Bilger – “Public Scholarship in Multiple Platforms”

Faculty and Student Engagement with Technology at Claremont McKenna College (Freeberg Forum/LC62)
3:35 – 3:45 Prof. Cynthia Humes – “Executive Summary Report on Faculty and Student Engagement with Technology at Claremont McKenna College”

Summit Closing Session (Freeberg Forum/LC62)
3:45 – 4:00 Dean Nick Warner – “What did you learn? What do you need?”
Bill Ascher has been at CMC since 2000, teaching courses on environmental and natural resource policy, development policy, and international organizations. He was CMC’s Dean of the Faculty from 2000 to 2005, and currently chairs the International Relations Program. His most recent publications include, Knowledge in the Environmental Policy Process (with Robert Healy and Toddi Steelman) (Cambridge, MA: MIT Press), and Bringing in the Future: Strategies for farsightedness and Sustainability in Developing Countries (Chicago: University of Chicago Press). He also has several recent chapter contributions focusing on economic development patterns in Latin America as well as Social Policy in Indonesia.

**Lecture Capture**
To maintain contacts in the international energy industry, he taught a hybrid face-to-face and online course for the Global Energy Management mid-career program at the University of Colorado, Denver. He will remark on lecture capture and other technologies he used for the course, and he will comment on the challenges of teaching this type of course pedagogically as well as technologically, providing an assessment of the content, workload, and limitations of the hybrid mid-career course called “Leadership in the Energy Sector.”
Audrey Bilger, Ph.D.
Professor of Literature & Faculty Director of the Center for Writing & Public Discourse

Audrey Bilger is the faculty director of the Center for Writing and Public Discourse and professor of literature at Claremont McKenna College. Her most recent book, coedited with Michele Kort, the anthology *Here Come the Brides! Reflections on Lesbian Love and Marriage*, was a 2013 Lambda Literary Award finalist. She is the author of *Laughing Feminism: Subversive Comedy in Frances Burney, Maria Edgeworth, and Jane Austen* and editor of a critical edition of Jane Collier’s 1753 *An Essay on the Art of Ingeniously Tormenting*. She is on the editorial board of Pickering and Chatto's *Gender and Genre* series and the *Burney Journal*. Her work has appeared in *Ms* magazine, the *Ms*. blog, *Bitch* magazine, the *Los Angeles Times*, and she is the gender/sexuality editor of the *Los Angeles Review of Books*.

Public Scholarship in Multiple Platforms
In addition to publishing in traditional scholarly venues, Professor Bilger regularly writes for a variety of online publications and translates her classroom and research work for a general readership. As but one example, she will show how the internet can help to promote intellectual discourse, and she will talk about how she drew on her scholarship to write three different web publications and conduct a radio broadcast to call attention to the bicentennial of Jane Austen’s *Pride and Prejudice*. She will discuss the need for scholars writing online to be prepared to reframe material to suit different platforms and audiences. When faculty members actively participate in discussions in the public sphere by writing and publishing online, our research, teaching, and the mission of liberal arts colleges becomes more visible and valued by the public at large.
Diane Halpern, Ph.D.
The McElwee Family Professor of Psychology & Roberts Fellow

Diane has won many awards for her teaching and research. Most recently, she received the 2013 Association for Psychological Science James McKeen Cattell Fellow Award for a lifetime of outstanding contributions to applied psychological research. Diane is a past president of the American Psychological Association, the Western Psychological Association, the Society for the Teaching of Psychology, and the Division of General Psychology. Diane has published hundreds of articles and over 20 books including Thought and Knowledge: An Introduction to Critical Thinking (5th Ed., 2014); Sex Differences in Cognitive Abilities (4th ed.), and Women at the Top: Powerful Leaders Tell Us How to Combine Work and Family (co-authored with Fanny Cheung). Her other recent books include Psychological Science (4th ed. with Michael Gazzaniga and Todd Heatherton) and the edited book, Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline.

Operation ARA: What We Can Learn About Scientific Reasoning from Aliens and Avatars

Operation ARA is a serious game developed by Keith Millis (Northern Illinois University), Art Graesser (University of Memphis), and Diane F. Halpern (Claremont McKenna College) with input from a team of marvelous professionals, talented students, and snotty avatars. It was funded with a multiyear grant from the U. S. Department of Education (Institute for Educational Sciences) and is commercially available from Pearson Higher Education, Publishers.

Your mission: to expose the aliens who endeavor to take over Earth by stealing our natural resources, spreading bad science, and lulling mankind into mindless consumerism. These aliens
must be stopped. As an agent with the Federal Bureau of Science, you will receive the latest training methods to spot aliens posing as human scientists, you will identify the flaws in research from a variety of fields, and you will interrogate suspected alien spies. This is the science-fiction plot behind Operation ARA, an Intelligent Tutoring System (ITS) that teaches scientific reasoning and critical thinking skills. Student players become Federal Bureau of Science agents-in-training charged with defending Earth from aliens who are intent on destroying it. To defend Earth, student agents must learn the principles of the scientific method and critical thinking. The student players then must use these principles to evaluate case studies and interrogate suspected alien scientists.

Operation ARA employs the scientific principles of learning and serious games. Students are engaged in the material using the pedagogical principles of active learning, immediate feedback, dialog interactivity, multimedia effects, distributed practice, and transfer of learning. “Hard fun” is another principle that may increase the success of educational or epistemic games. This phenomenon describes the resulting sense of satisfaction students experience after struggling to understand a difficult topic. That is, the student’s enjoyment should increase as the game moves from teaching basic declarative knowledge in the first module to the use of this knowledge in the analysis of ecologically valid cases in the later modules.
Mark Huber joined CMC in the Department of Mathematical Sciences in 2009. He works in the area of computational probability, designing Monte Carlo methods for applications in statistics and computer science. His areas of expertise are probability, statistics, computers, applied mathematics, and calculus.

Using Instructional Videos In and Out of the Classroom
Together with colleague Deanna Needell, we will look at short form (3 to 10 minutes) videos and several different ways they can be used in a typical class. The pros and cons of the many types of videos, as well as different software for easily creating videos will be discussed. We also will present our experiences using this type of video as a supplemental learning tool and as an extra credit vehicle.

Workshop
We will walk participants through the creation of a simple short educational video using the (free) PowToon software.

Manfred Keil received his Ph.D. from the London School of Economics. He joined the faculty of Claremont McKenna College in 1995. He has taught in the Robert Day School of Economics and Finance (formerly the Department of Economics) since then, primarily in the fields of macroeconomics, econometrics, and statistics. In the summer of 2009, he completed his three year term as the Chairman of the Faculty of the RDS. Before coming to CMC, he held appointments in Boston, Montreal, and England. In addition to being a faculty member at the RDS, he is a research fellow of both the Lowe and the Rose Institutes.

**Flipped Classroom**

At the beginning of the first lecture in Econ 120, Statistics, in January, I announced 'There is good news and bad news for you. The good news is that I am flipping the classroom, the bad news is that I am doing this for the first time.' Since only 5 of the 45 students knew what 'flipping the classroom meant, there was not much good news, period. It has been a wild ride for much of the semester. I will report on the advantages and disadvantages of this new teaching method as I see it. There will be a short PowerPoint presentation followed by extensive Q&A.

**Workshop**

This workshop will be a hands-on explanation of the technical issues in “flipping” the classroom.
Daniel Michon, Ph.D.
Assistant Professor of Religious Studies

Daniel Michon joined CMC in 2007 and teaches courses on South Asian religious history. His research specialty crosses the disciplinary boundaries of archaeology, religion, history, and numismatics. His book *Archaeology and Religion in Early Historic Punjab: History, Theory, Practice* is forthcoming from Routledge India. In his work, he uses digital technologies to aid his interpretation of archaeological data. To that end, he was awarded a National Endowment for the Humanities research grant for his project, “Virtual Taxila.”

**Digital Humanities**
While digital humanists have certainly struggled to find a single definition for the broad movement called “Digital Humanities,” the lack of a singular definition has not completely silenced their voices within the academy. For example, there now exist peer-reviewed journals, dedicated annual conferences, and academic research centers associated with the term. However, for many academics, the key question is not *what* is digital humanities, but rather more simply, *what is the purpose* of digital humanities? This presentation engages the emerging, and in fact already contentious, debate concerning the role of the digital humanities in academia.
Deanna Needell, Ph.D.
Assistant Professor of Mathematical Sciences

Deanna Needell joined CMC in 2011 and is currently an Assistant Professor in the Mathematical Sciences Department. Her research interests include Numerical Analysis, Geometric Functional Analysis, Statistics, Probability, Applications to Computer Science, and Scientific Computing. In particular, she works in the area of Compressed Sensing. She graduated with her Ph.D. from University of California Davis, under her adviser Roman Vershynin. She was a postdoctoral fellow in the Mathematics and Statistics Departments at Stanford University, working with Prof. Emmanuel Candès. She is the recipient of a Simons Foundation Collaboration Grant, an AIM SQuaRE grant, and an Alfred P. Sloan Research Fellowship. She has won the ScienceWatch Fast-Breaking Paper Award, the ACHA Top Article award, and the IEEE Young Author Best Paper award.

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Michael Sutton is in his 14th season as Director of Athletics at Claremont-Mudd-Scripps after a 21 year coaching career in the department. During his tenure as Director of Athletics, Sutton has overseen a department that has grown to 21 sports – 10 men’s, 11 women’s – at the NCAA Division III level in addition to 13 club sports and an intramurals program. Sutton has overseen the addition of women’s lacrosse and women’s golf to the varsity level. Approximately one in six students at Claremont McKenna College, Harvey Mudd College and Scripps College participate in intercollegiate athletics at CMS.

Sutton is the fourth individual to hold the title of director of athletics at Claremont-Mudd-Scripps. Over his tenure, CMS teams have won 98 SCIAC titles in 17 of the 21 sports, a SCIAC-best 14 tournament titles and captured 10 overall SCIAC All-Sports trophies. The success of CMS Athletics across the board has seen the program earn five top-25 finishes under Sutton in the NCAA Division III Director’s Cup standings, including a program-best 13th place finish in 2012-13.

Sutton is a former member of the NCAA Swimming & Diving Rules Committee and the NCAA Water Polo Committee and was the team leader of the 1992 United States Olympic Water Polo Team. He is a 1976 graduate of Claremont McKenna College.

Economics of Technology – Using Technology to Get More for Less
Nowadays, in the world of College Athletics, strategic use of technology has become essential for team and class success. Join Director Sutton and some of his fellow Athletics faculty to learn about how they have deployed innovative technology for recruiting through their database and video file sharing program. Presenters will also speak about how they have used technology to improve teaching our students about how to up their game. as well as to involve diverse audiences, including our parents and alumni. The strategic investment in technology has helped Athletics to implement one of the best Athletic programs in the country, and saved the department considerable time, resulting in cost savings and efficiency.
Piercarlo Valdesolo joined CMC in 2011 and is currently Assistant Professor of Psychology and director of the Moral Emotions and Trust lab. He teaches courses in social and moral psychology and his research explores the psychological bases of trust, cooperation and moral judgment. He is co-author of the book *Out of Character* and his work has been featured in venues such as *The New York Times*, *The Atlantic*, and *The Washington Post*. He is a member of the Editorial Board of the journals *Emotion, Journal of Experimental Social Psychology* and *Journal of Personality and Social Psychology*, and he is a regular contributor to *Scientific American* and *Psychology Today*.

**Social Media in the Classroom**

"Who sends emails anymore?" This was a high school student's dismissive response to an audience member's comment at a recent panel on cyber-bullying at Facebook headquarters in Menlo Park. It shook my sense of tech-competence to the core. The manner in which our students relate to each other is mediated by increasingly sophisticated technology, and research has shown that this is systematically altering the way they process information more generally. This session will highlight the ways in which I've incorporated social networking tools into my classroom and laboratory, in a (desperate) attempt to keep pace with this trajectory.

**Workshop**

This workshop will discuss in greater detail the fine-points of some of the social networking tools that I have incorporated into my classroom and technology, and I will respond to audience questions of how they might want to augment their own teaching and research through social networking tools.