Advancing New Pedagogies Task Force
Executive Summary

Liz Liddy and Lois Agnew, Co-Chairs

The Advancing New Pedagogies Task Force convened in February, 2013, to conduct a preliminary investigation of how innovative pedagogies can be identified and fostered at Syracuse University. Our first task was to conduct a survey to identify innovative pedagogical practices that our colleagues are currently using across campus. This survey yielded examples from approximately 300 courses, which illustrate an impressive range of strategies for promoting students' active engagement in their learning. The information from the surveys, which was posted to a Google site created for the Task Force's use, provides a useful starting point for highlighting varied ways in which Syracuse University faculty members are using agile and creative instructional methods. After conducting and discussing the survey, the eighteen Task Force members divided into five subcommittees that focused on one or two of the six remaining charges given to us by the Vice Chancellor. Each subcommittee developed a report and recommendations before the task force's target report-out date of June 1, 2013.

While specific details from the subcommittee recommendations differ, all members strongly endorsed the university's effort to place a stronger emphasis on pedagogy. This emphasis has been visible to the university community through the creation of the Task Force, and it is our hope that it will be sustained in the future through the development of a strategic vision and ongoing commitment to pedagogical innovation. While one subcommittee suggested that this commitment might include a physical campus center that would support conversations about pedagogy, this recommendation was not unanimously supported by other Task Force members. After reviewing all subcommittee recommendations, the Task Force co-chairs agree with the Incentive Subcommittee that a more cost effective alternative would be for all levels of university leadership to highlight, support, and expand organic structures and initiatives that already exist across our campus. Examples of these initiatives include:

- SITETL (the Summer Institute for Technology-Enhanced Teaching and Learning), an intensive week-long program conducted by ITS staff for faculty teaching online, face-to-face, and/or blended classes;
- The iSchool's Syllabus Club, a group of faculty that meets regularly to review syllabi and discuss new teaching methods;
- Various institutes and teaching sessions sponsored by the School of Education;
- "Reimagining Student Writers," a series of events sponsored by the Writing Program to engage colleagues across campus in conversations about issues in writing instruction; videos and materials from these events are regularly

posted at *wrt.syr.edu/suwrites/* for the benefit of those who are unable to attend the sessions in person;

- The LCS "Undergraduate Best Practices Committee," which meets regularly with faculty to discuss new pedagogies. This committee has recently been awarded a $1M NSF grant for the purpose of promoting new pedagogies;
- Interdisciplinary teaching initiatives in the School of Architecture, such as the Trans-Disciplinary Media Studio and the Einhorn Next Generation Studio, a project currently underway to construct an innovative teaching and learning environment;
- College-wide pedagogy committees, found in Whitman and Newhouse, which might be used as models for other schools and colleges;
- University librarians regularly work with instructors across disciplines to include information literacy into course curricula and to integrate primary source materials and research strategies into their courses.

In addition to encouraging these types of grassroots efforts to promote meaningful conversations about pedagogy within and across departments, schools, and colleges, we recommend additional methods of recognizing effective teaching practices and making those practices accessible to faculty across campus. One way of pursuing this goal would be to ask strong teachers to open their classes (both on campus and online) to those who might be interested in observing innovative methods. These "teach-ins" could help observers understand the connection between innovative practices and the larger context of successful pedagogy, and would also promote collaboration and conversations about teaching across campus. The task force's survey provides a preliminary list of faculty members who have taken steps to develop innovative pedagogical methods. We suggest that Deans and Department Chairs review this list, choose faculty members who would be particularly strong exemplars, and identify additional faculty members who might be invited to participate in the "teach-ins".

Another method for disseminating innovative teaching methods would be an online video archive in which faculty members speak briefly about their teaching methods and provide materials that could be useful to other instructors. Such a site would need to be monitored and updated on an ongoing basis, perhaps by staff from ITS involved in the SITETL program.

The two other focuses of the Task Force's investigation and recommendations are more externally facing. The first is to initiate a year-long, campus-wide program that brings national pedagogical innovation experts to campus to complement the intra-SU conversations suggested above. Many outstanding experts are identified herein, along with sufficient detail as to their expertise to enable a rich and varied calendar of speakers that would appeal to all, and would further demonstrate the administration's commitment to high quality, innovative pedagogy. We suggest that these invitations be coordinated with the grassroots on-campus initiatives in order to ensure that the university receives maximum benefit from the invited speakers.

The second external focus of the Task Force was an investigation into consortia of all types. It was concluded that consortia provide a three-way opportunity, as they would: 1) offer our students access to courses that are of interest to them, but which SU doesn't offer; 2) provide our faculty with increased enrollment by adding students from other member universities to their courses that are threatened due to low enrollment, and; 3) offer the college and university ways of expanding course offerings through connecting with consortia members who are offering courses that would otherwise be high-cost and low enrollment. While the Task Force believes that consortia of all types have a tremendous potential for positively impacting the overall quality of SU's educational offerings, it does recognize that consortium partnerships pose a threat to some faculty who may fear that they can lose the right to teach their specialized, but low-enrollment courses. But participation in a consortium can also be presented as having a positive impact on pedagogy by forcing teachers of low-enrollment courses to so improve the quality of their teaching that students from other member schools will elect to take their courses.

While schools and colleges should be encouraged to join and actively participate in consortia in their own subject domains, the Task Force strongly supports the ongoing discussion amongst the provosts of the Colonial Group about forming a university-level consortium for sharing online courses, for either or both the traditional for-credit online courses and / or MOOCs. Additionally, the Task Force is impressed with the high-quality opportunity open to SU in joining edX, the MOOC consortium, and strongly encourages such a partnership be vigorously pursued.

The full report contains many rich, creative, and useful recommendations in each of the subcommittee sections, as well as details of the process and findings of the very dedicated faculty and staff who worked so collegially on the Task Force.

In summary, the Task Force believes that SU has tremendous, perhaps unrecognized high pedagogical quality on campus as exemplified in the many outstanding practices it has collected. Therefore, our over-riding recommendation, in addition to the two external emphases described above, is that the University commit at all leadership levels to explore, support, actively communicate about internally and externally, and reward the organic structures and initiatives that already exist on campus. We believe that done with sufficient leadership and support, the goal set forth by the Provost to "…move toward a new level of sensitivity and increased exploration and activity related to advanced pedagogical techniques and new teaching/learning modalities…" can be very successfully accomplished.

Inventorying & Showcasing Innovative Pedagogies

Lois Agnew, Chair, Brooks Gump, Bill Ward

The first charge taken up by the Advancing New Pedagogies Task Force was a survey to identify innovative pedagogical practices that our colleagues the university are currently using in their classrooms. This survey yielded a strong response. We have gathered examples from approximately 280 courses, and these examples collectively illustrate the range and depth of attention to pedagogy that currently exist on our campus. The information from the surveys was posted to a Google site created by Liz Liddy and her staff, and this will provide an ongoing resource for future pedagogical initiatives.

The Survey Results and the Center for Teaching

The subcommittee charged with identifying possible methods for supporting innovative pedagogies has developed a proposal for a center for teaching and learning that would provide a central site on campus where conversations about pedagogy would take place. This proposal nicely connects with our subcommittee's effort to imagine how the task force's work can be shared with the campus community. Below, we offer suggestions for how the survey information might be organized and made accessible to colleagues across disciplines. We also outline specific formats for sharing innovative pedagogies with interested instructors. However, we agree that these plans will best be realized through the university's investment in a structure that can sustain this initiative in the long term.

There are several ways in which such a centralized structure would make a valuable contribution to our proposal. First of all, the survey the task force has conducted is only a starting point. Although we have gathered an impressive number and broad range of examples, our list is by no means exhaustive. Continued attention to the creative work of Syracuse University teachers will yield more examples and will foster a culture in which such contributions are valued.

In addition, the task of coordinating events and developing a website will necessarily have to be done after our task force's work is completed on June 1st. Our subcommittee is aware that the recommendations we offer here will have to be carried out by others, who will likely engage with these ideas but also adapt them in ways that reflect their interests and priorities.

We also believe that a strong teaching culture cannot be created at a single moment. It will be crucial for the strong momentum and positive energy created by the task force to grow and mature over the years. Such a process requires infrastructure, strong faculty leadership, and resources.

Strategies for Dissemination

Our subcommittee has identified the following possible ways of sharing the information we have gathered and promoting conversations about pedagogy on campus:

1. One-day conference, which could launch the initiative, report on the task force's work, and feature 5-10-minute teaching presentations by faculty members across disciplines.

2. Video archive of teaching presentations posted to a designated location on the university website. This archive could include brief presentations and teaching materials that instructors are willing to share publicly.

3. An online resource that would contain sample courses from the survey, cross-referenced according to key teaching strategies, with links that would provide more information. Such a resource would require consistent oversight, which would have to be integrated into plans for the future. It might be possible for information studies classes to develop projects focused on classifying this information.

4. Monthly events focused on discussion of particular faculty members' teaching innovations, rotating through different departments/schools/colleges. These featured sessions could include face-to-face presentations by faculty members, but these could be captured on videos that would ensure the website's continuing vitality.

5. Monthly brown bag discussions about pedagogy that would bring together faculty members across disciplines for conversations about specific strategies for engaging students.

6. Events focused on specific aspects of innovative teaching developed by faculty leaders who would be in a position to encourage participation from colleagues across campus.

We recommend that all of these demonstrations and conversations aim toward guiding participants toward understanding the relationship between the learning goals and the pedagogical strategies that have been developed to meet these goals. This will ensure that participants will develop not only specific ideas about classroom strategies they might use, but will also see models of how skillful teachers develop teaching practices that consistently take into account the larger pedagogical aims of their courses. With competing demands for faculty time across scholarship, teaching, and service, we have developed a plan for dissemination that is sensitive

to these time constraints. In addition, some of the pedagogical methods that will be highlighted are designed to improve both teaching efficiency and quality.

Organizing pedagogical methods: Rationale

The surveys reveal that one important task involves organizing the vast array of teaching methods so that they will be accessible and useful to teachers in various disciplines. We believe it's important to do so in a way that emphasizes particular qualities, characteristics, and/or strategies for innovative teaching that instructors across disciplines will see as potentially relevant to their work with students.

We recommend avoiding any organizational structure focused on specific technologies or platforms. With the exception of courses in which the learning outcomes include proficiency in specific platforms, technology is generally the means rather than the end of teaching. It is therefore our view that our primary focus in structuring the material we've received through the surveys should be on the qualities that define student learning and engagement, along with how that engagement supports students in pursuing the broader aims of the course. For this reason, we hope to show how technologies support broader learning goals with some methods, rather than serving as an end in themselves. Moreover, technology is not a part of some innovative pedagogical methods we highlight.

Organizing pedagogical methods: Sample structures

Below are categories that have emerged from our review of the survey, which point toward specific ways in which innovative pedagogies are promoting successful student learning at SU. We believe that the categories we have identified here are sufficiently flexible that they can accommodate varied examples, and that a number of examples might be applicable to several different categories. We offer these categories as a starting point, with the understanding that over time, new ways of organizing sessions pertaining to pedagogy will evolve as new versions of innovative pedagogies continue to develop. It is also impossible to limits innovative pedagogies to any narrow category. This list offers one approach for efficiently managing the large quantity of data we have collected, but most courses fit multiple categories and reflect innovations that cannot be fully captured in a short description.

We begin with the premise that innovative pedagogies necessarily support active student engagement. Pedagogical methods promoting that engagement vary according to class structure, academic content, and intended outcomes.

Sample organizational principles:

1. **Pedagogical strategies that promote students' active engagement in various course formats**

Active students in lecture classes

CHE 106 and CHE 116: General Chemistry I and II (Timothy Korter, Robert Doyle, Ulrich Englich, Michael Sponsler, Ari Chakraborty, others)—(These classes serve approximately 1650 students during the academic year.) The MasteringChemistry online homework system allows students to get immediate feedback on their work in chemistry, offers students ongoing tutorials, and provides the basis for assessment of overall class performance.

HOA 105/106: Arts and Ideas (Lucinda Dixon)—Blackboard outlines provide thumbnails that connect students with a wide variety of information (virtual tours, music film clips, museum sites, etc.) about works of art being studied in the class.

AAS/ANT 112, AAS/SOC 353, AAS/SOC 413 (Kishi Animashaun)—Pop quizzes using clickers help to assess students' engagement and make teaching more efficient.

AAS/SOC 353, AAS/SOC 413 (Kishi Animashaun)--Blackboard can be used as a portal for managing student assignments and grading.

COM 101: Practical Grammar for Public Communications (Joan Deppa)—Lecture using clickers, online and inclass testing—various technological formats used to engage students

COM 117: Multimedia storytelling (Corey Takahashi)—Students are encouraged to use smartphones to make videos, which have replaced outdated camcorders that often malfunction.

COM 117: Multimedia storytelling (Corey Takahashi)—Instructor hosts special speaker events to take up specific topics that are of interest to students.

COM (Seth Gitner)—Multi-Media Storytelling, Visual Storytelling StoryCube, etc.

COM—Workshopping/critique sessions on multimedia work

COM 400: Social Media & Need 2 Know (William Ward)—Various social media and digital platforms and flipped classroom promote student engagement.

COM 505: Communications Law for Journalists (Barbara Fought)—Posting questions from previous tests to Blackboard quiz function provides students with "virtual tutor." Poll Everywhere promotes student interaction.

COM 600: Social Media Theory and Practice (William Ward)—Students' use of technology expands their engagement and understanding of how social media function.

MAG 205: Introduction: Editorial, Ethics, and the Business of Magazines—Jeopardy-style game introduces students to the magazine business.

MAG 408: Magazine Editing—"Editing Olympics" with skills-based events in which students work in teams

LIN 421/621: Introduction to Methods for Language Teaching (Amanda Brown)—streamed recordings of language classes give students professional examples and connects students at remote locations

CHE 150/151: General Chemistry for engineers (Timothy Korter)—This lecture and laboratory course serves approximately 250 students per year. Innovations in the class include new uses of technology, including handheld wireless data acquisition devices in the laboratory, and custom laboratories that focus on specific issues relevant to engineers.

EAR 105: Earth Science (Paul Fitzgerald)—Multiple strategies for keeping students engaged in a lecture class of 350 students: Mastering Geology, clickers, asking students to submit picture of geological phenomena, attention to natural disasters.

EAR 117, EAR 225: Earth Sciences (Daniel Curewitz)—Active learning, analogy and transferal, repetition and re-application through sketching and verbal recitation.

CSD 723: Assessment of Children's Language (Megan Leece)—Guest Lecture Poll enables the instructor to get regular feedback from class.

CFS 201: Family Development (Matthew Mulvaney)—clickers used in large lecture section; clickers more effective in CFS 447 than online format.

HTW 121/HTW 402/HTW 407/HTW 408/HTW 409 (Jim Byrne)—Turning Technologies allow immediate assessment of students' preparation and comprehension.

NSD 481/682: Medical Nutrition Therapy (Kay Bruening)—Cell phone polling

CRS 225: Public Advocacy/CRS 334: Intro to Argumentation (Lynn Greenky)—Various technologies are used to increase students' involvement in the class of approximately 130 students. Students earn extra credit through Wiki definitions posted on Blackboard.

PHY 211: General Physics I (M. Lisa Manning)—Lecture class of approximately 200. Instructor uses iPad to record lectures, clickers to monitor class attendance and participation, SAGE online self-assessment, and Facebook page.

PPE 385: Motor Behavior/PED 250: Team Sports/PED 508: Coaching Physical Education (Luis Columna)—Use of various technologies to engage students and monitor their attendance and assess their work.

ECN 203: Economic Ideas and Issues (Jerry Evensky)—SAGE software allows teachers to design assessment tailored to their needs and to engage in self-assessment.

PSC 342: Politics and Religion in the Israeli-Palestinian Crisis (Miriam Elman)—Student participation in this course dealing with controversial topics is facilitated through dividing students into small working groups that are assigned specific tasks pertaining to course readings.

GEO 171: Human Geographies/GEO 272: World Cultures (Jamie Winders)—Carefully structured courses, evident in the articulation of "today's plan," help students focus on key concepts and follow the development of the lecture.

SCI 104 (Sharon Dotger)—Supports students' science learning through: integrating laboratory investigations with class discussion of data; using argumentative frameworks that support students' reflections on their learning; using digital resources to facilitate students' work; students' use of science to develop solutions.

MUE 334/534: Methods and Materials in General Music/SED 440/650: Participation in Professional Development School/Music (Nicole R. Robinson)—Blogging and instant text polling

Astronomy 101 (Duncan Brown)—Think-pair-share questions with cards, lecture tutorials, backwards-faded laboratory exercises, assessment by diagnostic testing

Physics 102 (Martin Forstner)—Think-pair share questions with cards, just-in-time teaching

Physics 212 (Matt LaHaye)—Think-pair-share questions with cards

Physics 212 (Ed Lipson)—Think-pair-share questions with clickers

Physics 211 (Lisa Manning)—Just-in-time teaching, clicker responses, Facebook group, SAGE online self-assessment, interactive class website, lectures and clicker solutions posted online, iPad with Doceri presentation software

Physics 211 (Britton Plourde)—Think-pair-share questions with clickers/cards, interactive workshop-style discussion sections

Physics 211 (Tomasz Skwarnicki)—Think-pair-share questions with clickers

Physics 212 (Mitch Soderberg)—Think-pair-share questions with cards

Upper-level undergraduate physics courses use small group problem sessions (Jay Hubisz, Cristina Marchetti, Alan Middleton, Joe Schechter)

IST 233: Introduction to Computer Networking (Dave Molta)—Course combines traditional lectures with experiential and on-line learning components.

IST (Scott Nicholson)—Structured approach allows the instructor to de-center the classroom and guide students rather than serving as sole authority. The "Six Phases of Debriefing" approach engages students and helps them make connections between their work in class and the "real world."

IST 639: Enterprise Technology (Doug Taber)—Class exercises encourage students to find ways to put lecture concepts to use.

IST 605/IST 677 (Jill Hurst-Wahl)—Students and instructor used Twitter to communicate with each other during and between class sessions.

IST 614: Introduction to Management (Steve Sawyer)—One or two-week modules focus on specific course objectives. Students address specific management problems in each module. Responses provide the basis for class discussion.

School of Architecture—Use of Adobe ConnectPro will allow students in Syracuse and NYC to participate in public events relevant to the school's lecture series.

EDU/MUI 600: Studio Rec. (Abbott/Blanck)—The inclusive Music Recording Studio extends the popular and successful course offered as a core curriculum in the Music Industry and Bandier Programs.

MAT 100: Statistical Analysis (Hyune-Ju Kim)—A new course aimed at teaching a wide range of statistical methods efficiently.

Amanda G. Nicholson (Whitman) offers general teaching strategies that promote student success: 1) Instructors learn and use students' names 2) Attendance policy 3) Organized courses 4) Participation and discussion 5) Regular evaluation of all assignments 6) Regular office hours.

ECS 325: Mechanics of Solids (Joan Dannenhoffer) – uses hands on models for demonstrating concepts, uses SAGE, uses online computer tools for in class problem solving

ECS 221: Statics (Joan Dannenhoffer) - uses hands on models for demonstrating concepts, uses SAGE, uses online computer tools for in class problem solving

MAE 400: Fuel Cell Science and Technology (Jeongmin Ahn) – incorporates team-based, hands on experimental work on fuel cell development and testing

ECS 102: Introduction to Computing (Marjory Baruch) – uses class time for students to work collaboratively on programming skills

Studio courses/hybrid formats/"flipped" classrooms

MAG 408: Magazine Editing—Workshopping sessions on students' work, in-class writing exercises

MAG 408: Magazine Editing—Design day in which students critique each others' work

Graduate Classes (Sharon Dotger)—student argumentative writing develops through repeated drafting and revision

WRT 426, WRT 427 (Krista Kennedy): Students prepare for the diverse demands of various work environments when the class is divided by face-to-face and online instruction; they must learn to collaborate with others in varied ways.

CSD 212: Intro to Communication and Science Disorders (Megan Leece)—3/4 of the class is devoted to lecture, and the rest is spent on an investigation exercise conducted in teams.

IST 618: Information Policy (Martha Garcia-Murillo)—Instead of lecturing, the instructor is developing simulations, games, debates, problem solving, and group activities. Lectures are video-taped, and experts elsewhere are also supplying video lectures.

Leadership for Global Engagement (Martha Garcia-Murillo)—Class structure involves shifting configurations, from round table to small group tables to open space.

IST 616: Information Access and Organization—Flipped classroom; students listened to/read lectures at home, had in-class workshops, opportunities to discuss material.

IST 616: Motivation and 21st Century Learning (Ruth Small)—Online with two-day campus residency. Course deals with teaching 21st century literacy skills in the context of and collaboration with classroom teaching and assignments.

IST 659: Database Administrative Concepts and Management (Susan Dischiave)—This lecture/lab course features hands-on exercises that enable students to apply what they have learned in the lecture.

Einhorn 21st Century Studio (Randall Korman, Brian Lonsway, Kathleen Brandt, Victor Tzen, et al.)—An initiative using donor funds to explore effective ways of integrating media into design studio pedagogy.

IDE 656: Computers as Critical Thinking Tools (Koszalka)—Hybrid course, with guidelines for faculty provided with online offerings.

FALK: Integrative and Functional Nutrition (Raj)—Course that brings together graduate students in Nutrition Science, registered dietitians in practice, and nursing and medical students.

Thomas Barkely (Whitman) teaches a non-Whitman class conducted with a residency and online component.

CEN 231: Mass & Energy Balances (Katie Cadwell) – uses flipped classroom model

CEN 412: Chemical Engineering Laboratory II (Cadwell)—This course is taught using open-ended and business relevant lab project.

BEN 465/665: Biomechanics (James Henderson) – uses flipped classroom model with Prezi for content delivery online

ECS 104: Engineering Computational Tools (James Henderson) - uses flipped classroom model with Prezi for content delivery online

ECS 391: Legal Aspects of Engineering and Computer Science (Burstyn)—This course is taught in a discussion/case study format that meets over dinner in the evenings.

Using digital platforms to make course knowledge/vocabulary widely accessible to students in face-to-face classes

CEN 587: Chemical Reaction Engineering (Jesse Bond) – uses smart pen to capture lecture notes (audio and visual) and posts materials on Blackboard. Also uses smart pen to create supplemental materials.

CHE 616: Solid-State Chemistry (Mathew Maye)—Online features enhanced student access to lectures, lecture notes, discussion boards, and social media, and also made textbooks more inexpensively and readily available

ENL 620: Advanced Oral Communication in Teaching (Amanda Brown)—webinars streaming of course readings, blogging, LinkedIn

LIN 400/600: Field Methods (Omer Preminger)—students post data they've gathered about the language they're investigating to a dedicated website

HOA 105/106: Arts and Ideas (Lucinda Dixon)—Blackboard outlines provide thumbnails that connect students with a wide variety of information (virtual tours, music film clips, museum sites, etc.) about works of art being studied in the class.

WRT 205 (Emily Luther)—Blogs, RSS feeds, social media teach students how writing, sources, information circulate.

COM 101: Practical Grammar for Public Communications (Joan Deppa)—Prototype chapter for interactive grammar text posted to Blackboard, using universal design principles

CHE 347 and 357: Quantum Chemistry and FGH in Physical Chemistry Laboratory (Bruce Hudson)—The use of modern commercial quantum chemical programs gives students opportunities to engage in more sophisticated and complex work.

CHE 626: Organometallic Chemistry (Ivan Korendovych)—Students create Wikipedia entries about topics relevant to the course. This promotes engagement on the part of students and makes their knowledge publicly accessible.

EAR 420/620: Contaminant Hydrogeology/HRS 250: Global Water/EAR 200: Water and the Environment (Donald Siegel)—Replaced textbooks with web-based materials from government and other open sources.

FAS 423: Fashion Design: Senior Collection II (Nyugen Long-Nam To)—Simulated atelier environment provides students with maximum opportunities to apply their design skills.

CSD 600: Pediatric Feeding and Swallowing (Carrie Tamayo)—Online discussion threads posted to Blackboard engage students in conversations about weekly readings.

CSD 723: Assessment of Children's Language (Cross/Milosky)—A computerized language analysis software program enables students to conduct in-depth analysis of children's language samples.

HTW 306: Public Health Administration System/HTW 302: Influencing Health Behavior (Lisa Olson-Gugerty)—Use of Prezi creates more dynamic presentations.

CRS 327: Speechwriting/CRS 603 (Amos Kiewe)—Doceri prompts new levels of engagement.

SHR 247: Intro to Strategic Management (Natarajan Balasubramanian)—Group project discussion board and use of various digital platforms promote student engagement and provide multiple avenues for learning.

WRT 307: Professional Writing (Dawnelle Jager)—Prezi used for student presentations

LAW 813/LAW 837 (Isaac Kifir)—Blackboard, prezi, and images are posted in Blackboard. Students submit papers electronically for feedback.

AMC 545: Diction in Singing/MHL 546: Vocal Literature (Kathleen Roland Silverstein)- Digital technology is valuable in voice teaching.

CHE 616: Solid-State Chemistry (Mathew M. Maye)—Online features enhance student access to course material.

FAS 223: Fashion Skills and Techniques/FAS 341: OptiTex Fashion Software (Laurel Morton)—Demo videos, group assignments, and fashion business content facilitated through Blackboard.

DSP 700: Universal Design in Education/SPE 612: Differentiating Instruction for Diverse Learners (Wendy Harbour)—use of blogs in place of journals; students take notes to eliminate notetakers, model universal design, and convince students with disabilities that they are capable of taking notes

IST 624: Preservation of Library and Archival Collections (Ken Lavender)—Set up of a lab demonstration desk a la Julia Child, broadcasting to screens around the room to show materials and demonstrations

IST (Bruce Kingma)—Innovative delivery increases student access to excellent teachers. IST 195 is taught by Jeff Rubin as a large section supported by multiple discussion sessions. Several sections of IST 444 are taught by Susan Bonzi, who teaches students to make an "elevator pitch" aimed at prospective investors. The class was moved to the Carrier Dome, and the focus shifted to "Dome Pitches."

Architecture ThinkLab (Brian Lonsway and Kathleen Brandt)—This lab on the 4th floor of the Warehouse provides students with a rich array of software and hardware technologies and development platforms for human-computer interaction, information display, and modeling, as well as a growing body of expertise on transdisciplinary thinking in the way of tools, techniques, and methods which can be used within or outside of the laboratory.

Next Generation Classroom (Architecture)—402 Slocum is equipped with a multi-projector display wall along with video and audio transmission and recording capacity to support multimedia presentations integrated with teleconferencing.

ARC 407, ARC 408, ARC 500 (Gregg Lambert, Mark Linder, Brian Lonsway, Jonathan Massey)—The Transdisciplinary Media Studio uses digital media to foster multi-directional and interdisciplinary teaching and research collaborations.

ARC 207, ARC 307, ARC 308 (Art McDonald, Bruce Coleman, et al.)—Architecture faculty use tablets to mark up student digital drawings, sketch, and project markup and sketch activity.

MAT 414: Introduction to Ordinary Differential Equations (Kovalev)—The online platform Piazza facilitates the handling of students' questions.

MAT 296 (Leuschke): Students find the class pace more manageable when the instructor writes lecture notes on a tablet in real time. Students also find the notes useful in studying.

EFL 00x: English Accuracy (Gallardo): Students use personal computing devices to create and locate content materials they can share with each other. Blackboard is also useful for posting student contributions as they respond to assignments asking them to work out language communication challenges in teams.

CPS 100: Introduction to Animation and Game Development (Mohan): Uses the Alice development environment to create visual introduction to computer programming.

SCM 265 (Kazaz)—The practice of recording and posting lectures has benefited students.

MaryAnn Pointek Monforte (Whitman) uses expressions.syr.edu to create an interactive website linked to Twitter. She recaps each class and notifies students that it is available through Twitter.

Online courses

CRS 327: Speechwriting (Amos Kiewe)—Online versions of the course work well.

EDU-ELL 400: Tutoring English Learners in Schools in the U.S. and Abroad (Louise Wilkinson)—The class will be conducted primarily online, with asynchronous and synchronous design elements.

IST 605: Reference and Info Literacy Services (Renee Franklin Hill)—Weekly mini-lectures provided through Powerpoint slides. The course is asynchronous, with no real-time interactions between teacher and students.

IST 617: Motivational Aspects of Information Use (Ruth Small)—Graduate course for students from iSchool masters and doctoral programs, as well as Maxwell, VPA, and Newhouse. Learning module-based design is based on motivation theories and models students will be learning throughout the semester.

IST (Bruce Kingma): SU has been a national leader in online education. Noteworthy initiatives include the School Media Program, the first online program in library and information science in the country, and the Web-based Information Science Education

(WISE) consortium. Kingma notes that "the future of online education is really in the blended model—mixing online with face-to-face learning to expose students to the best of both worlds."

IST 600: Gaming in Libraries (Scott Nicholson)—A one-month, one-credit online course offered through YouTube videos.

IST 613: Library Planning, Marketing, and Assessment (Scott Nicholson)—Audio comments were provided to students through Adobe Reader. Lectures were delivered through M4A, an image-over-voice format.

Various online IST courses (Scott Nicholson)—Each Monday, the instructor posts a "howdy video" containing informal conversation about the instructor's life and Syracuse events, as well as information about what students need to know for class during the coming week. Students respond favorably to this personal touch.

IST 600: Meaningful Gamification (Scott Nicholson)—Students were invited to create their own syllabi half-way through the semester. The instructor facilitated the use of the syllabus that students voted as their choice.

IST 972: School Media Practicum (Franklin Hill)—Video messages welcome students to each week's activity and offer practical information about school librarianship.

IST 661: School Media Management (Barbara Stripling)—Video lectures, documents shared through Google Dobs, infographic assignment, scenarios create focal points for weekly discussion forums

IST 971: LIS Internship (Barbara Stripling)—Internship logs provide opportunities for student reflections.

IST 611 (Marilyn Plavocos Arnone)—Students design a blueprint school library website based on web site evaluations.

IST 611 (Marilyn Plavocos Arnone)—An "anonymous confidence meter" helps students measure their confidence in their mastery of course material.

IST 676: Fundamentals of Digital Data (Jian Qin)—Students developed a group proposals for a digital library to create an audio archive of rare recordings housed at the University of Victoria School of Music.

IST 677: Creating, Managing, and Preserving Digital Assets (Jill Hurst-Wahl)—Students used a class blog to explore and share information about a specific digitization program.

IST 676: Digital Libraries (Jill Hurst-Wahl)—Students used SharePoint to gather and share information about digital libraries.

IST 620: Topics in Information Innovation: Social Media and Online Community Management (Kelly Lux and Jenn Pedde)—Various methods foster student engagement. Class meets via Google+ handout every other week, but hangouts are recorded. Students also blog, share posts through twitter, and share resources. Textbook authors also participate in Google+ hangouts. Student moderators lead discussion in Google+ Community sessions.

ANT 100: Introduction to Anthropology (DeCorse)—The online format supports continuing education and distance education for career professionals, as well as commuter, disabled, and non-traditional students.

REL 200: Islam and the Modern World: Worldview and Misconception—Introductory course dealing with Islam culture and way of life.

ART 361: Pleasure of Seeing Western Art (Zaima)—Course aimed at students seeking art history or art appreciation class and global English-speaking community and global Chinese-speaking community.

NDS 225: Nutrition and Health (Brann/Bruening)—This required course for most Falk majors has been redesigned to reach students from all majors interested in a non-laboratory science course.

SOS 601: Fundamental of Conflict Resolution (Gerard)—This signature course at Maxwell provides students with an overview of the interdisciplinary field of conflict analysis and resolution. Current students and the professional community requested an online version of the course.

LAW: Law for Entrepreneurs (Hagelin)—Brings together SU students with non-matriculated practicing professionals in business, science, and engineering.

MBC 631 (Comprix)—PowerPoint slides for the course include lecture materials plus opportunities for problem solving. Additional strategies include the use of voiceovers to guide students in solving problems, videos that provide instructor feedback, and live chat sessions that enable students to ask questions. These chat sessions are also recorded for students who are unable to attend the initial session.

Interdisciplinary teaching

Architecture ThinkLab (Brian Lonsway and Kathleen Brandt)—This lab on the 4th floor of the Warehouse provides students with a rich array of software and hardware technologies and development platforms for human-computer interaction, information display, and modeling, as well as a growing body of expertise on transdisciplinary thinking in the way of tools, techniques, and methods which can be used within or outside of the laboratory.

ARC 407, ARC 408, ARC 500 (Gregg Lambert, Mark Linder, Brian Lonsway, Jonathan Massey)—The Transdisciplinary Media Studio uses digital media to foster multi-directional and interdisciplinary teaching and research collaborations.

ARC/ECS 500 (Sinead MacNamara and Clare Olsen)—Architecture and Civil Engineering students work together in this course, sponsored by an NSF grant, collaborating on the design and simulation testing of thin-shell concrete structures.

WRT 401/402: Advanced Workshops in Technical Communication (Mike Frasciello)—a two-course sequence aimed at preparing electrical engineering majors for writing in their profession.

Product Development Office (Luke Walsh and Pat McGowan)—This office will provide students across majors with opportunities to collaborate with each other in entrepreneurial ventures.

MFT 600: Trauma Focused Therapy—Child and Family Studies (deLara)—A multi-disciplinary institute on integrative approaches to mental health and substance abuse.

2. Teaching strategies that encourage students to understand how their learning connects them with audiences beyond the classroom.

Applied learning: Professional and industry engagement, internships, and mock in-class exercises that capture "real-world" conditions

COM 400: Social Media & Need 2 Know (William Ward)—Professional social sharing provides students with immediate understanding of the world they hope to enter.

ADV 523: Digital Branding (Brian Sheehan)—Workshop at digital ad agency provides students with opportunities to put their digital expertise to work in a real world context

ADV 625: Advertising Campaigns (James Tsao)—Students work as teams to simulate ad agencies developing campaigns for real businesses.

BDJ 204: News in a Multimedia World (Barbara Fought)—Students learn about reporting and civics in this course, which is structured around modules that include student presentations, guidance from faculty about how to write news stories dealing with different contexts, and encounters with reporters covering these beats

WRT 401/402: Advanced Workshops in Technical Communication (Mike Frasciello)—a two-course sequence aimed at preparing electrical engineering majors for writing in their profession.

Newhouse (Simon Perez): Strategically encourages students to engage with situations that prepare them for the professional world. Approaches include using the city of Syracuse as their reporting market, covering live events with smart phones, simulating live reporting scenarios, asking students to post story ideas to Blackboard, and leading students through story development process.

COM (Sean Branagan)—TED talks and Business Model Generation canvas

COM Trend-Spotting (Sean Branagan)—Speakers from different industries hep students learn about innovations that are likely to affect media in the future.

ICC 400/6000: New Media Entrepreneurship (Sean Branagan)—Significant portion of the course grade is based on reviewers' scores of the final project.

COM Lean Digital Media Startups (Sean Branagan)—Encouraging students to develop entrepreneurial perspective.

COM 600: Social Media Theory and Practice (William Ward)—Students' use of technology expands their engagement and understanding of how social media function.

MAG (Aileen Gallagher and Corey Takahashi)—Department tablet competition offers graduate students an opportunity to produce "tablet magazine" ideas that will compete to be chosen for production and presentation in the App Store.

MAG (Aileen Gallagher)—Department-wide digital events bring magazine professionals to campus to discuss industry trends.

MAG 205: An Introduction: Editorial, Ethics, and the Business of Magazines (ann Hettinger)—students are required to interview people in the industry in order to produce profiles of a magazine.

MAG 406: Article Writing (Melissa Chessher and Harriet Brown)—Pitch Café gives students opportunities to sell article ideas from students.

MAG 408: Magazine Editing (Aileen Gallagher)—Students conduct usability testing and develop prototypes for new magazine apps.

EAR 420/620: Contaminant Hydrogeology/HRS 250: Global Water/EAR 200: Water and the Environment (Donald Siegel)—Civil Action trial at the Federal Courthouse, exploration of a contaminated site near Syracuse, with honors students serving as jury and material witnesses.

FSC 440/FSC 660: Cold Cases (Robert Silver)—Class is organized into a "crime laboratory," and students use forensic science to solve a real "cold case."

CSD 677: SLP in the Schools (Janet Ford)—"Mock" IEP meetings provide students with opportunities to practice diagnosis and communicating technical information without using jargon.

CSD 650: Clinical Practicum (Ramani Voleti)—Simulated software program called "simuCase" provides students opportunity to practice simulated cases in a speech and language clinic.

CSD 650: Clinical Practicum (Joe Pellegrino, Tammy Kordas, Kristen Kennedy)—Students are given feedback on their performance in diagnosing hearing issues to ensure that they are prepared for externships.

SPM 300: Olympic Odyssey (Rick Burton)—Students have an intensive experience with the Olympics through varied activities, including a visit to the U.S. Olympic Training Center in Lake Placid and a guest appearance by a medal-winning Olympian

NSD 482/682, NSD 484/684: Medical Nutrition Therapy labs (Kay Bruening)—students work in teams to conduct simulated nutrition assessments based on public patient cases

PAI 709 (Tina Nabatchi)—Students assume the role of employees who are assigned the task of briefing "the boss" (instructor) on the presentation of a guest lecturer.

EDU 620: Program Development in Teacher Education (Joanna Masingila)—Students analyze multimedia case studies pertaining to teacher education.

IST 444: Information Reporting and Presentation (Scott Nicholson)—All work in the class is based on the students' work for a company of their choice. All assignments are shared in small groups for feedback.

IST 755: Strategic Management of Information Resources (Jason Dedrick)—Exercises involve students in various ways of conducting data analysis in order to predict the results of marketing campaigns.

IST 971: LIS Internship (Barbara Stripling)—Internship logs provide opportunities for student reflections.

IST 488/688: Social Web Technologies (Keisuke Inoue)—Students design social web systems in groups using Ruby on Rails, and present their work to a public audience at the SU App Competition, where there work is evaluated by judges.

IST 687: Scientific Data Management (Jian Qin)—Students survey U.S. federal agencies that give grants for scientific research and analyze their data policies.

IST 444: Information Reporting (Peggy Brown)—Various exercises encourage students to develop presentation skills: an "elevator pitch" designed for an SU

administrator/instructor, impromptu speeches, an exercise in which students must communicate through gestures but without words, a workshop aimed at cultivating qualities in the voice that will engage the audience, and labs focused on design skills.

IST 618: Information Policy (Lee McKnight)—Students adopt roles involved in policy simulation based on current news items.

IST 352: Analysis of Organizational Systems/IST 359: Introduction to Database Management Systems (David Dischiave and Susan Dischiave)—Students create solutions to solve specific problems using the Systems Development Lifecycle.

The Law School offers a series of clinic courses in which students learn through helping clients with specific legal issues. These include: LAW 909: Bankruptcy Clinic (Germain); LAW 957/958: Children's Rights and Family Law Clinic I and II (Melendez); LAW 955: Community Development Law Clinic (Kenn); LAW 903/905: Criminal Defense Clinic I and II (Berger); LAW 923/924: Disability Rights Clinic I and II (Schwartz); LAW 912/913: Elder Law Clinic I and II (McNeal); LAW 914: Low Income Taxpayer Clinic (Nassau); Securities Arbitration and Consumer Clinic (Pieples); LAW 815: Technology Commercialization Research Center (Hagelin).

Many law courses feature an experiential learning component. These include: LAW 747: Real Estate Transactions (Malloy); LAW 711: Land Use and Zoning (Malloy); LAW 828: Advanced Criminal Evidence (Kelder); LAW 890: Child Health Policy (Campbell); LAW 891: Climate Change Perceptions, Policy and Science (Driesen); LAW 827: Corporate Financing Transactions (Warburton); LAW 864: Estate Planning (Turnipseed); LAW 723: Federal Tax II (Nassau); LAW 822: INSCT Research Center Course (Banks); LAW 763: Disability Law (Kanter); International and Comparative Disability Law (Kanter); LAW 814: Technology Transactions Law (Hagelin).

LAW 920: Externship Program(Pfeiffer)—Second- and third-year students in good standing apply and are interviewed for placements with established placement sites.

CAR 580: Film and Animation Production (Fedak): Offers SU film/animation students opportunities to engage with professionals in the field.
CSD 600: Pediatric Swallowing (Milosky)—Summer course that provides comprehensive coursework for CSD students and continuing education opportunities for community service providers.

DES 601/648 (Heckman/Westerveldt)—Gateway for students and professionals interested in exploring different ways of thinking as designers, which can lead to innovative approaches in helping organizations in the public and private sector.

HTW 400/600: Native American Public Health (Lane/Naribe): History of Native Americans focused on health issues.

NAT 308: Iroquois Linguistics in Practice (Abrams)—Capstone course of the Certificate in Iroquois Linguistics, designed for students and teachers of the Iroquois languages and linguists, anthropologists, and people interested in revitalization efforts.

ARC 500: From the Ground Up (Norman)—Seminar about innovative, sustainable redevelopment strategies; includes conference on housing design and development, bringing together students and professionals in design, policy, and finance.

SOC 700: Managing Crisis and Disasters (Hermann)—First of annual Institute on Managing Crises and Disasters: Toward Bridging the Science-Policy-Civic Divides.

UC supports summer intensive courses that bring together students at all levels of professional and academic experience: SOE 600: Teaching and Leadership (Bey); STA 300: Introduction to Performance Art (Bey).

SWK 400/600: Introduction to Equine Asst. Activities—Brings together undergraduates from various SU programs and local professionals interested in specific therapies and continuing education credit.

VPA (Aiken): Introduction to Museum Studies—Workshop that provides a survey of museum theories and practices to a new audience in Dubai.

SCM 265 (Kazaz)—Students use a book manuscript written by the instructor to work with case studies that teach them the principles of supply chain management.

SCM 777 and SCM 400: Global supply chain strategy courses (Kazaz)—Students engage in consulting projects for local businesses.

MBC 610: Opportunity Identification and Ideation/MBC 647 Global Entrepreneurial Management (Gregoire)—This courses uses an experiential learning approach, focused on projects with external clients.

MaryAnn Pointek Monforte (Whitman) has graduate students do a financial statement/industry analysis project that involves researching the Dow Jones Sustainability Index, understanding the index criteria, and comparing the performance of a company on the index with one in the same industry sector that is not on the index.

MBC 618 and SHR 247 (Balasubramanian)—In-class simulations at both the graduate and undergraduate levels help students learn through immersing them in questions that apply to competition and innovation in the business world.

CIE 400: Field Learning Experience (Sam Clemence and Eric Lui) – uses field trip to civil engineering project sites to expose students to real world applications

ECS 325: Mechanics of Solids (Alan Levy) – incorporates guest lectures from practicing engineers who talk about course material in the context of their everyday work

CIE 475: Civil and Environmental Engineering Senior Design (Sam Clemence and David Chandler) – students work on projects that are client-driven and real-world in nature

Community engagement

LIN 422/622: Advanced Methods for Language Teaching (Amanda Brown)—off-campus teaching practicum at West Side Learning Center

LIN 400/600: Field Methods (Omer Preminger)—students gather data about an unfamiliar language through working with native speaker of that language

SPA 439/639: Community Outreach: Language in Action (Marie Emma Ticio Quesada)—encourages students to immerse themselves in language through community connections

PAF 315 (Bill Coplin)—Students develop research insights through projects for community agencies

ANT 481: Ethnographic Techniques (John Burdick)—Students learn research methods, ethnographic interviewing techniques, and research budget management by working with community-based organizations.

IST (Bruce Kingma)—Community partnerships produce better learning outcomes for students, provide experiences that lead to employment, and help the area economy. Projects include the GET program, NYC STL, RvD IDEA, and interdisciplinary projects including the South Side Newspaper, Technology as a Public Good, and the Community Law Clinics.

IST 400/IST 600: Technology as Public Good (M. Venkatesh)—Students developed software tools for the Burmese Karen community on the Northside.

IST 613: Library Planning, Marketing, and Assessment (Megan Oakleaf)—Students must identify and develop interconnected project plans, marketing plans, and assessment plans connected to a host institution's strategic plan and present their projects to the host librarian.

IST 605: Reference and Information Literacy Services (Megan Oakleaf)—Students learn about library reference work through observation of professionals in the field.

Architecture—Many architecture faculty have partnered with community groups and not-for-profit organizations such as the Near Westside Initiative to teach community engagement courses and design studios. These have generated ideas and planning studies, and some have resulted in completed buildings and renovations.

ARC 500 (Larry Bowne, Sinead MacNamara, et al.)—Student organization Freedom by Design initiated a design-build collaboration with Jowonio School, resulting in construction of a Play Perch treehouse on the school's campus.

WRT 470: The Power of Story, Organizing for Power (Parks): Trains students in helping community-based organizations develop leadership and democratic capacity.

Formats designed to engage students with new audiences, develop a more global perspective, and acquire a more immediate sense of how their academic work connects with diverse audiences

WRT 426: Digital Identities (Krista Kennedy)—relationship between social media and the rhetorical construction of identity

ADV 625: Advertising Campaigns (James Tsao)—Students work as teams to simulate ad agencies developing campaigns for real businesses.

SPA 301: Approaches to Reading Texts in Spanish (Monica Poza Dieguez)—social media connects students with each other and people beyond the class and university

Proposed courses in advanced Spanish (Gail Bulman)—use of social media to create a digital platform that will allow students to deepen their cultural understanding through regular interactions with peers and leaders in Spain and South America

Spanish linguistics courses (Marie Emma Ticio Quesada)—Blackboard has created a community space in which students share their learning with each other.

WRT 205: Critical Research and Writing (Nicole Moss Underwood)—a local newspaper editor judges a competition in which students write articles for publication

BDJ 364: Radio/Audio News Reporting, BDJ 464: TV/Digital News Reporting, BDJ 664, BDJ 667 (Barbara Fought)—Students post news stories to a public website and receive significant public readership in that way.

CHE 626: Organometallic Chemistry (Ivan Korendovych)—Students create Wikipedia entries about topics relevant to the course. This promotes engagement on the part of students and makes their knowledge publicly accessible.

DSP 775: Gender, Disability, and Sexuality (Beth Ferri)—Skype allows students to interact with authors whose work they're reading during the semester.

GET 487/GET 687: EuroTech (David Dischiave and Susan Dischiave)—This traveling seminar explores intersections between information and information technology and developments in European global enterprise technology deployment.

ARC 337, ARC 338, ARC 637, ARC 500, ARC 638 (Jonathan Massey)—Students in architectural history courses develop multimedia research projects in blog and website format. In partnership with archives and communities, they research local and regional urban history. Selections from the research will be published online as a historical atlas of upstate New York.

SPA 400: Creative Writing in Spanish (Lara-Bonilla)—This course invites SU students and the larger community to explore their creative powers by practicing reading and writing in Spanish.

University College supports a number of non-credit courses, which allows the university to reach new audiences through continuing education activities: VPA: Non-Credit Workshop (Spitzner)—This one-week, non-credit workshop introduces students to fundamental business skills for the arts, design and media professions; ISN 200/201: Non-credit Professional Dev. For Librarians (Small)—Three two-day weekend face-to-face and hands-on workshops that allow librarians to explore uses of technology for teaching and learning and in library programs and services; CFS (Moreno)—the Syracuse Summer Summit for Children and Families at Risk, a non-credit three-day seminar with Falk, McMahon Child Advocacy and SUNY Upstate; ETS (Beauvais)—non-credit creative writing conference; MUS (DiCosimo): Non-credit SummerStomp—workshop for middle school and high school students.

SPA 100/200: Spanish Immersion (Nock/Clinton)—aimed at high school students with advanced knowledge of Spanish, as well as undergraduate students

SOC 700: Managing Crisis and Disasters (Hermann)—First of annual Institute on Managing Crises and Disasters: Toward Bridging the Science-Policy-Civic Divides.

VPA (Aiken): Introduction to Museum Studies—Workshop that provides a survey of museum theories and practices to a new audience in Dubai.

3. Pedagogical strategies for encouraging critical perspectives responsive to contemporary contexts.

Critically exploring uses of digital formats

COM 400: Social Media U Need 2 Know (William Ward)—Students analyze various digital and social media platforms and consider their uses for achieving specific results.

WRT 255: Advanced Argumentative Writing (Emily Dressing)—students consider how digital technologies have affected civic discourse

Steven Hoover, Abby Kasowitz-Scheer, Tarida Anantachai, Lisa Moeckel are developing courses in information literacy in collaboration with the iSchool.

GEO 595 (David Robinson)—Students study different aspects of the development of the internet and critique the development of a series of webpages.

PSC 700: Political Leadership (Margaret Hermann)—Students research various dimensions of a political leader's life and work over the course of the entire semester. Presentations ensure that students learn about a number of different leaders during the semester.

DSP 700: Universal Design in Education/SPE 612: Differentiating Instruction for Diverse Learners (Wendy Harbour)—Technology "labs" where students reflect on different technology each week.

IST 600: Digital Communication from Theory to Practice (Jennifer Stromer-Galley)—Varied methods allow students to engage in the class: synchronous chat application, Skype conference, online class session through message board. Shifting modalities help to engage students and also encourage them to reflect on the varied challenges and opportunities that surround different types of digital communications.

IST 618: Information Policy/453: Telecommunication Regulation/452: Information Policy and Decision Making (Lee McKnight)—Class projects require students to examine wireless grids edgeware and consider their implications.

Engaged research

CHE 139/422: Honors General Chemistry Laboratory (Robert Doyle and Karin Ruhlandt)—This innovative class makes research more central to the students' learning. Senior mentors work with younger students in developing advanced research techniques.

WRT 308: Style (Nicole Howell)—Students develop meta-level awareness of how writing styles and revision strategies are shaped by genre and context

WRT 303: Advanced Writing Studio: Research and Writing (Henry Jankiewicz)—Class forms a research community that establishes rhetorical situations that shape research methods and genres

WRT 303: Advanced Writing Studio: Research and Writing (Kate Navickas)—students do archival projects about Syracuse University's history, which prompts greater investment in their work

WRT 205: Critical Research and Writing (Jason Luther)—students did research in the Belfer Audio Archives to produce a script for Sound Beat, an NPR syndicated program

WRT 200: DIY Publishing (Jason Luther)—students did research from special collections to learn about do-it-yourself print artifacts and produce zines inspired by that artifact

WRT 105 (Becky Howard)—This faculty member's extensive research in issues of academic integrity has enabled her to develop strategies for helping students learn to engage more thoroughly and responsibly with sources.

HOA 412: The Gothic Spell (Matilde Mateo)—Careful course design encourages students to find multiple points of entry for engaging with complex questions.

WRT 255: Advanced Argumentative Writing (Emily Dressing)—Students explore connections between their own experiences and the production of researched arguments about civic issues.

WRT 422: Creative Nonfiction (Minnie Bruce Pratt)—Students explore LGBT creative nonfiction as a genre that provides them with opportunities to write effectively about the complex realities they experience.

CHE 117: General Chem Lab II/CHE 600: Chemical Biology (Yan-Yeung Luk)—Integration of teaching with research.

SWK 738: Core Concepts in Trauma Treatment for Children and Adolescents (Tracey M. Marchese)—Course in trauma using the PBL approach.

The report prepared by Steven Hoover outlines a number of ways in which librarians creatively support classroom teaching, both through face-to-face sessions and online tutorials.

ECS 200/500: What Color is your Energy? (Santanam)—Students without engineering backgrounds explore how energy concepts and practices are integral to their professional and personal lives.

WRT 413: Rhetoric and Ethics (Agnew/Browne)—Students engage with historical questions surrounding the ethical complexities that surround language use and persuasion and consider how these questions continue to shape contemporary issues.

4. Pedagogical strategies that foster community in the classroom

Enhancing teacher feedback and strengthening teacher/student connections

BDJ 204: News in a Multimedia World, BDJ: Broadcast/Digital Newswriting, BDJ 364: Radio/Audio News Reporting, BDJ 464: TY/Digital News Reporting (Barbara Fought)—Gives personal and effective audio feedback to students through Blackboard

Spanish linguistics courses—Marie Emma Ticio Quesada—Uses a series of online activities to track students' progress and provide individual feedback.

ARC 207, ARC 307, ARC 308 (Art McDonald, Bruce Coleman, et al.)—Architecture faculty use tablets to mark up student digital drawings, sketch, and project markup and sketch activity.

Student-to-student collaboration

COM 400: Social Media U Need 2 Know (William Ward)—Social media enhance students' team building skills.

WRT 307: Professional Writing (Krista Kennedy)—collaboration through Wiki instruction assignment

ADV 625: Advertising Campaigns (James Tsao)—Students work as teams to simulate ad agencies developing campaigns for real businesses.

COM 344: Students produce final multimedia project in teams

COM 600: Social Media Theory and Practice (William Ward)—Students' use of technology expands their engagement and understanding of how social media function and their ability to work in teams.

EAR 105: Earth Sciences (Christopher K. Junium)—collaborative test taking

CHE 139/422: Honors General Chemistry Laboratory (Robert Doyle and Karin Ruhlandt)—This innovative class makes research more central to the students' learning. Senior mentors work with younger students in developing advanced research techniques.

EAR 117, EAR 225: Earth Sciences (Daniel Curewitz)—Allowing students to work together promotes engagement and helps students connect their interests with course material.

CSD 212: Intro to Communication and Science Disorders (Carrie Tamayo)—Students work in teams that facilitate their engagement with course material.

CSD 212: Intro to Communication and Science Disorders (Megan Leece)—3/4 of the class is devoted to lecture, and the rest is spent on an investigation exercise conducted in teams.

PAF 101 (Bill Coplin)—Students help design the next semester's course and advise their peers.

ECN 203: Economic Ideas and Issues (Jerry Evensky)—Undergraduate Supplemental Instruction leaders provide help to other students and gain experience in teaching and leadership.

ECN 365: The World Economy (Kristy Buzard)—Peer instruction and discussion leadership enhances student learning

ECN 301: Intermediate Microeconomics (Inge O'Connor)—Innovation through removing technology. Student engagement has been heightened through the requirement that they work in groups, writing up findings they acquire from class handouts, notes, textbooks, and interactions with the teacher.

EED 337 (Sharon Dotger)—Peer-to-peer teaching, evaluation is done through measuring evidence of student learning

SED 413/613: Methods and Curriculum in Teaching Mathematics (Joanna Masingila)—students work in collaborative problem solving groups, adopting the perspectives of both students and teachers.

MAT 117: Foundational Mathematics via Problem Solving/MAT 118: Foundational Mathematics Via Problem Solving II (Joanna Masingila)—Students engage in cooperative problem solving. Exams have a group part and an individual part.

MAT 112: Algebraic Operations and Functions (Joanna Masingila)—Students engage in cooperative problem solving. Groups present solutions to the class and teach each other mathematical ideas and procedures. One class assignment is a group project.

ARC 508 (Victor Tzen, Anda French, Julia Czerniak, Ted Brown)—Offers students an opportunity to use a collective framework for developing individual thesis projects.

ECS 101: Introduction to Civil and Environmental Engineering (Clemence)—This course includes a laboratory experience that includes hands-on instruction in AutoCAD taught by undergraduate teaching assistants. After about one month of instruction the class is divided into design teams and assigned a project to design a shopping mall for a specific area of land with specifications by the owner. For the final project of the semester, students work in teams to design a large scale model wooden bridge.

ECS 101: Introduction to Mechanical Engineering (Carranti)—This course includes a team-based project in reverse engineering of consumer products.

MEE 332: Machine Design (Carranti)—This course includes a team-based project in vehicle design.

MEE 471: Capstone Design (Carranti)—This course includes a large-scale, team-based design project with fabrication of product/process/test apparatus/model.

CIE 326: Civil Engineering Materials (Dannenhoffer)—Students write five-paragraph essays on a topic of their choice relevant to the curriculum, and then work on a more in-depth 5-10-page paper and group presentations with students who have written about similar topics. They also conduct group scavenger hunts to locate different

materials being used around campus, photograph them, and develop a PowerPoint presentation based on their findings.

Addressing different learning modalities

SPE 324: Differentiation in Inclusive Classroom (Julie Causton)—Co-teaching class, low-tech sensory supports, music for entering, exiting, and transitions between activities, movement several times through each class, texting and tweeting important points, Facebook, turn and talks in place of lectures, response cards, Blackboard splash, diverse technologies

COM 101: Practical Grammar for Public Communications (Joan Deppa)—Prototype chapter for interactive grammar text posted to Blackboard, using universal design principles

BIO 400/600: Developmental Neuroscience Classroom (Katharine Lewis)—Uses a new method for analyzing scientific papers called CREATE. This method provides students with diverse approaches to analyzing scientific material, including concept mapping, cartooning, and completing analysis templates.

CSD 315/615: Anatomy and Physiology (Soren Lowell)—Students create clay models to apply their knowledge of anatomical features involved in voice production.

CSD 212: Intro to Speech Lang and Hearing Disorders (Tammy Kordas)—Student volunteers wear foam earplugs at a social event and share their insights about the psychosocial aspects of hearing loss.

SOC 355: Health and Health Policy (Madonna Harrington Meyer)—Students keep food logs and reflect on their eating habits as part of their academic study of food in the U.S.

DSP 700: Universal Design in Education/SPE 612: Differentiating Instruction for Diverse Learners (Wendy Harbour)—use of blogs in place of journals; students take notes to eliminate notetakers, model universal design, and convince students with disabilities that they are capable of taking notes

GET 400: Independent Tech Ed (Deborah Nosky)—This course encourages students to develop the strategies they need to become life-long learners. Students are encouraged to work independently to develop strategies that will suit their individual learning styles.

Ideation Lab #2 (Marcene Schnell Sonneborn)—DaVinci's Theory of Multiple Perspectives helps students identify three ways of approaching problems.

EFL 00x: English Oral and Textual Communication (Edmonds): Game show formats facilitate vocabulary building and offer students different ways of approaching the course content.

Institutionalizing Pedagogical Innovation

Jerry Evensky, Alan Foley, Michael J Frasciello, Jenny S Gluck

Executive Summary

The sub-committee on Facilitating & Supporting Pedagogical Innovation is charged with identifying University infrastructure support which could ensure that processes for pedagogical innovation across the University are sustained.

The sub-committee proposes the creation of a *Center* for teaching and learning to support high quality teaching across the University, with a special emphasis on innovative pedagogy. The Center is an Academic Affairs base budget unit that provides faculty with training, support, and resources. Our recommendations are that the Vice-Chancellor:

1. Convene a taskforce to develop an implementation plan for the Center by spring 2014
2. Secure necessary funding, space and resources
3. Hire a Center Director by fall 2013 with an appropriate faculty-line appointment – To be in place to lead the Task Force
4. Create the Center as proposed

Center Overview

The Center will be a working space for active communities of inquiry and practice around teaching and learning. The goal of the Center is to ensure high quality teaching across the University while also making Syracuse University a recognized leader in imaginative approaches to the pedagogy of teaching and learning. The Center will attract faculty participation and partnership, and strategically leverage its resources through engaging faculty volunteers, sharing staff with other departments, and employing graduate assistants and work study students. *The Center will not be successful without the participation of the faculty*. To this end, faculty must be incentivized to value the services that the Center has to offer, so the Center must be seen as being responsive to faculty needs and interests.

The Center includes a *Pedagogy Garden* (PG). The *PG* will support creative pedagogy by encouraging and facilitating systematic and imaginative thinking about course and/or program design, facilitating implementation of sustainable, value added designs. To this end, the PG will provide resources for implementing and disseminating worthy and successful innovations, encouraging and facilitating adoption and adaption by others in the academic community.

General Services

Excellence in pedagogy begins with good teaching so of foremost importance among the general services to be offered by the Center will be services designed to enhance individuals' teaching skills. These services will include (but not be limited to) mentoring, microteaching, observation and critique, peer consulting, workshops, and seminars designed to enhance individuals' teaching skills set. A computer can deliver information and assess responses to questions, but it can't capture the opportunity of a teachable moment, encourage divergent thinking, or inspire a passion for learning. A teacher can. When we look back on our educational experiences what we appreciate are the teachers who added value to our education and what we cherish most are the teachers who inspired us.

The building blocks of our educational model are individual courses. The content and skills to be covered, and context of delivery of these courses vary dramatically across disciplines. With an appreciation for this diversity, the Center will facilitate the development of new courses and the evolution of existing courses by offering expertise on course design, syllabus development, assessment techniques (formative and summative), and technical expertise. The Center will be continuously engaged in research on best practices so that its support offers the most up to date options to teachers and informs them of new opportunities.

Each student completes an in depth program of study (a major) in one or more fields of inquiry. If our majors are to develop that depth of vision, it is essential that the courses that make up each major build mastery from introductory to advanced work. With this goal in mind, the Center will work with individual teachers and Departmental representatives on a Department's program to ensure a seamless progression of content and skills such that each level of mastery enables success at the next level.

Three groups will be given special attention by the Center.

- New faculty are often challenged by the many demands on their time. The Center will offer programs designed to help them develop their teaching skills with a special emphasis on strategies that make their time on this task more effective and efficient.
- Based on evaluations, some faculty may be identified by their Department as needing further development of their teaching skills. These individuals could be referred by the Department to the Center for support.
- *THE PEDAGOGY GARDEN*: Many faculty have innovative pedagogy ideas they would like to develop. The Center (or an expert committee) will assess the value of proposed innovations and to the degree deemed appropriate, encourage and nurture such innovations with conceptual, technical, and financial support.

Leadership and Staff

The Center will only be as successful as its leadership is effective. A **Center Director** should be appointed at the Assistant Provost level (to demonstrate importance of the enterprise). This individual should have a Ph.D. in Instructional Design, Development and Evaluation, or similar educational credentials. The Director should be an individual who is extremely dedicated to enhancing teaching and learning at the University and enthusiastic about working with fellow faculty members, with proven management skills. An individual who is capable of earning the respect of his or her colleagues will be more likely to be successful in engaging those colleagues as participants with the Center in pedagogical development. To this end, the Director must have presentational and interpersonal skills that communicate mastery of the field of pedagogy while at the same time an easy approachability that makes him/her an engaging individual with whom one would feel comfortable partnering. The Director plays a strategic role for the university by evaluating the need for and implementing new program initiatives that address teaching and learning technology opportunities, especially as instructor and learner needs change and as the technological environment evolves.

Center staff should have expertise in the following fields and areas of educational engineering:

- Instructional Design/Instructional Technology
- Universal Design for Learning
- Graphic and Animation Design
- Video/Audio/Social Media
- Accessible Learning Technologies
- Qualitative/quantitative classroom assessment tools and techniques (formative and summative evaluation)

Location and Space

There is a tremendous value to strategically locating the Center on campus. The location should have multiple rooms of different sizes or that can be configured in multiple ways. For example, private consultation space for one-on-one discussions, conference rooms for seminar-type discussions, and larger rooms for workshops or group events. The sub-committee proposes incorporating an experimental classroom into the Center in order to model exemplary pedagogy and creative classroom practices (the Pedagogy Garden).

The sub-committee proposes locating the Center in Bird Library. The central location of the library complex, the relative availability of space in the current building configuration, and the academic mission of the University Library make the library a logical location for the Center.

Virtual Components

The Center should provide a web site that provides downloadable content from the inventory collected by this Task Force, workshops or presentations, thought-provoking journal articles, assessment tools, and additional resources for faculty. Other virtual components could include a site for faculty to share materials in a closed fashion (similar to Google Drive).

Sustainability

The Center will need to recognize multiple forms of ROI to evaluate successful efforts and strategies. Ongoing data collection and analysis would offer the following benefits to the University:

- Monitoring impact on student success
- Increasing faculty willingness to teach pedagogically unique courses
- Supporting decisions on curricular planning and resource allocation
- Ensuring educational equity

Institutional Questions

The following questions will need to be addressed before fully adopting the sub-committee's recommendations:

- What courses will be supported (corporate professional education, non-credit extension courses, courses for campus-based students, etc.)?
- What metrics will be used to demonstrate success?
- What organizational changes will be projected for the future to continually improve effectiveness?
- How will faculty be incentivized to make full use of this resource?

Incentive – What Motivates

Bronwyn Adam, Julie Causton-Theoharis, Julie Hasenwinkel, Karin Ruhlandt

Innovation

Innovation occurs when people are motivated, encouraged, and supported to experiment with new strategies for approaching a task of importance to themselves and others. Some people seem self-propelled toward experimentation; however, most don't change their practices unless they see a good reason to do so. Today, many faculty acknowledge that traditional teaching practices are not engaging students to the extent they would like, but they may be unsure about alternative strategies and how to go about making changes. They need models, options, a supportive environment that provides assistance and encouragement, and consistent messages that innovation is valued by faculty colleagues, schools and colleges and at the institutional level. The most basic "incentive" for faculty experimentation is a climate that encourages and celebrates innovation—and recognizes that change is risky and often difficult.

Institutional Culture

Thus, the first incentive we suggest providing to faculty is at the macro level—an institutional culture that celebrates the centrality of learning—through teaching and research—at Syracuse University. Valuing the work of faculty should be part of all presentations, publications, and occasions, and the teaching role must be celebrated and rewarded through support and recognition at all levels and at all career stages of the faculty. We need to talk about teaching and provide resources to support professors—and we need to acknowledge that words alone will not suffice. Excellence in teaching requires passion, energy, attention, and innovation and in practice requires time—our most precious resource.

Syracuse University is a research university, and Syracuse faculty are scholars, artists, scientists, practitioners, and innovators. That work enriches our teaching and enables us to mentor and train graduate students and prepare the next generation of scholar-teachers. Teaching and research are not opposing activities but two sides of a coin of great value to our community, our institution, and our world. Faculty time, however, is finite and balancing the demands of teaching and scholarly work is not easy. Thus, incentives for innovation in pedagogy must include acknowledgement of the value of time and the need for support, assistance and appropriate compensation for planning and implementing new pedagogies.

We want to stress the importance of full-time, tenure track faculty and Professors of Practice as innovators in pedagogy. The value of attending a research-intensive institution resides in the strengths that active scholars, researchers, artists, and expert practitioners bring to their teaching. Providing support for scholar-teachers and practitioners so that undergraduates, as well as graduate students, can engage

with professors who have made recent, important discoveries, written influential texts, proposed transformative theories, and designed products or processes that have made important contributions to business, education, communications, or public health—this should be a priority.

We do not support any plan to create a two-track system that provides differential assignments to "teaching" and "research" faculty. Such a plan would make an institutional statement about the importance of teaching and the significance of active scholarship to inform curricular decisions and pedagogy. We further argue that research and expert practice inform teaching and that teaching informs research, scholarship and professional work–particularly in a global world in which new knowledge, ideas, and practices are changing at an increasingly rapid pace. We believe having professors in front of our students who are engaged in current timely research and professional practice strengthens our University in incalculable ways.

Vision & Plan

A publically shared and discussed strategic-plan to support "new pedagogies" will communicate an institutional commitment to innovation and teaching excellence, and broad faculty input will contribute to our thinking about how best to support innovation in our classrooms, studios, and laboratories—as well as in online spaces. People need to "find themselves" in a vision and plan, because not everyone accepts change in the same manner or at the same time. If "early adopters" are supported in their work and encouraged to share their experience with colleagues, the plan will likely continue to engage others in innovation.

Resources

Finding ways to incentivize faculty is not difficult in a resource-rich environment, and we are mindful that this is not our reality. Investing in teaching excellence, however, will pay dividends as students and parents learn that Syracuse faculty are innovators in pedagogy and that the institution provides for ongoing professional development and support for teaching. The "Engaging New Pedagogies" initiative can surely be cited as part of the "value proposition" for Syracuse University. Highlighting teaching innovation and excellence, including interdisciplinary courses, experiential learning, student publishing opportunities, international and field experiences, etc. will establish Syracuse University as a site where student learning and engagement are the highest priorities.

Spaces & Tools

Investment in classrooms, studios and laboratories and the technologies needed to support "new pedagogies" communicates the importance of the learning environment and serves as an incentive for faculty as well as prospective and enrolled students. Faculty need modern equipment in their teaching and office spaces as well as access to technology support that focuses on new tools and applications and greater efficiencies for all aspects of teaching.

Teaching spaces need to be equipped for the kinds of interaction and engagement that new pedagogies will include—and these technologies will continue to evolve and thus, so must classrooms. Laboratories and studios need to be equipped to enable cutting-edge experimentation and discovery. These are investments that will support innovative pedagogy and ultimately student success and marketability.

Investment in online spaces communicates the University's commitment to the international web of learners and participants who cannot—or choose not—to attend campus-based classes. Investment in online spaces establishes that Syracuse is committed to the opportunities of a global learning environment in which resources and information are shared and exchanged. However, we strongly believe that online learning needs to be accompanied by face-to-face interaction with faculty members. A wise implementation of online resources and instruction can enrich the learning experience but cannot be a substitute for personal interaction.

Time on Task

It is challenging if not impossible for faculty to undertake serious innovation alongside all their other duties. We must explore strategies for "making time" for innovation. Teaching loads are variable across contexts both in terms of sections and enrollments. Smaller classes, additional teaching assistants, and preferences in scheduling could provide some time for faculty exploring new pedagogies.

While there is a certain irony to "course relief" for teaching innovation, this is another option—and one that communicates a serious investment in new pedagogy. Relief of service responsibilities or other committee assignments can provide time for faculty to experiment with new course strategies or seek out coaching or training in new pedagogies.

Teaching loads must be considered when we ask faculty to reimagine their courses and experiment with new pedagogies. The time required for effective teaching is typically underestimated—and completely misunderstood outside of academe. Time to develop new course content and learning approaches, to prepare for classes, to design activities and assignments, to engage with students, to respond to their work, consult with them in office hours, and assess their progress and success—all of this is work done outside of "instructional hours." Teaching load is a primary consideration for "engaging new pedagogies." Real innovation requires considerable time and attention—and solid support.

Support–People, Places, and Things

Most faculty would benefit from both "instruction" and on-going support for new pedagogies. Workshops, seminars, and direct "training" sessions can provide faculty with skills, knowledge, and fresh ideas. These can be provided on campus, or faculty might attend such sessions away from campus. Attending sessions in pairs can provide peer support as implementation of new methods proceeds.

Providing travel funds for faculty interested in attending teaching conferences and workshops for the teaching conferences sponsored by their disciplinary associations can stimulate new ideas and provide guidance for implementation.

Departments/schools and colleges would benefit from dedicated support for teaching within the unit(s). Such support might assist with course planning, pedagogy options, and assessment of new methods. Much as distributed technology staff assist with technology needs, a teaching support person might be responsible for finding campus resources to assist faculty as well as proving direct support. This might be a linkage to Online Learning Services (ITS) or other support units on campus.

While the creation of a "teaching center" could provide this kind of support, we wonder how a central resource suits the highly decentralized nature of our campus. Faculty in the various schools and colleges—and the departments and programs within them—look to their immediate contexts as the source for the most "relevant" ideas and practices. Perhaps an "educator in residence" position in each College could be established to support faculty innovation. Such a position might be created as a rotating assignment and faculty from within the unit might consider serving in this capacity from time-to-time.

The bottom line is that faculty cannot be expected to engage in ongoing innovation without help: "go to" people, infusion of new ideas through conferences and working sessions, etc.

Events/Activities

Campus-wide events focused on innovation in teaching are a good way to bring people together across academic areas to exchange ideas with one another. Unfortunately, we know that attracting busy faculty to such events can be a challenge. Buy-in for such events is typically improved by direct knowledge of the presenters or personal invitation from a colleague. We may want to establish an ongoing advisory group for innovation in teaching including representatives from all the schools and colleges, much like the current Task Force, to solidify support for campus activities—or perhaps to plan and coordinate them.

On the other hand (or perhaps in addition), we want to encourage local or organic gatherings of colleagues to share and discuss teaching practices and new approaches. Groups like the School of Management's Teaching Committee and Engineering and Computer Science's Best Practices in Engineering Education Committee provide opportunities for faculty to gather at a local site for presentations, lunch discussions, etc. Making involvement in such events and activities as easy and comfortable as possible may be an incentive for more participation among faculty.

Campus wide events can be planned as times to exchange ideas across academic units, bring speakers and subject matter experts to campus to share new practices, and as opportunities to celebrate accomplishments and showcase innovation.

Evaluating Teaching

Support for teaching evaluation is an option academic units might consider to promote ongoing innovation. Chairs and program directors struggle to find time to observe faculty, review course materials, and study course evaluations to arrive at a holistic assessment of faculty in their teaching roles. Innovation may mean that we need to consider different modes of evaluation.

Consulting with the School of Education faculty and other experts could help to establish research-based methods for assessing student learning and options for continuing value-added assessments post-graduation.

Financial Incentives

Innovation Grants

Faculty innovation grants represent the primary way that most institutions incentivize faculty to experiment with new teaching methods, modes and arrangements. For example,

- Northwestern University
  http://www.northwestern.edu/searle/resources/grants-for-innovative-teaching.html
- University of Southern California
  http://cet.usc.edu/resources/awards_grants/fund/index.html
- University of Michigan
  http://www.crlt.umich.edu/grants-awards/crlt-grants
- University of Massachusetts at Amherst
  http://www.umass.edu/ctfd/grants/

Innovation grants were the catalyst for much of the innovation that occurred at SU in prior decades. Small grants of $2,000-4,000, the Faculty Instructional Grants, were awarded each semester, sometimes with a focus (i.e., technology) and sometimes open-ended. These grants provided money for student help, workshop attendance, or purchase of materials. These awards could not be used for salary or other direct payment to the faculty member.

The FIG program was followed by two larger grant programs (The Vision Fund and the Fund for Diversity) that supported both large-scale, multi-year initiatives as well as smaller, 1-year initiatives. The range of these grants was $5,000-30,000 depending on the scope of the project. Again, monies could not be paid to the faculty member but they could be used to buy the faculty member(s) out of a teaching section, providing them time to do project work. These grants supported the first dialogue circles on campus, planning for the LGBT curriculum, community writing projects, collaborative design of public spaces, the launch of the MLK library, implementation of learning communities, and many new courses and collaborations.

Innovation grants are typically competitive and selected by a faculty committee based on submitted proposals —as they were at SU from 1993-2005. Grants have many advantages: they communicate the importance the University places on innovation, they result in action, engaging multiple stakeholders, and they produce results that can be documented, shared, and celebrated.

Direct Compensation

Financial incentives for innovation might include:

- Summer salary for course development
- Bonus or salary adjustment for innovation or work with other faculty to innovate
- Discretionary funds for labs, field trips and other educational experiences

Faculty Awards

Aside from professional development, grants, salary incentives, and other inducements, awards and recognition reinforce the value of faculty work to the department, school/college and university. Taking advantage of University awards by nominating faculty colleagues sends affirmative messages about the importance of teaching. Celebrating award winners in publications and websites and at events reinforces the value of teaching excellence. Awardees can be called upon to mentor new faculty or provide guidance for innovation within the academic unit.

Many schools/colleges and departments have developed prizes or awards for exemplary teaching—and such awards might highlight innovation or "new pedagogies." At the University of Michigan, the provost awards a teaching innovation prize each year. See http://www.crlt.umich.edu/grants-awards/tip

While awards based on colleagues' recommendations are certainly valuable and reinforce the collective responsibility for "good teaching," we wonder about ways in which students might take a more active part in the awards process. Might they be the "nominators" for faculty awards? Could we consider ways to poll/survey students about their experience with faculty innovation?

The Faculty Reward System

It is a key irony that we are addressing rewards for faculty innovation in teaching within a rewards' system that situates teaching as less important than research, publication, and creative work at all levels of reward—from hiring through tenure and promotion as well as other recognitions. The best way to encourage consistent attention to teaching methods and effectiveness would be to value teaching more highly—beginning with annual pre-tenure reviews and in the tenure process. All faculty want to be successful teachers, but if ongoing innovation and experimentation take time away from more highly valued activities, many faculty

will naturally invest in activities that pay better dividends in terms of professional advancement.

Faculty values and priorities are established in the pre-tenure period and fixed in the tenure review. Thus, rethinking the way in which teaching—and in particular, pedagogical innovation, is considered in tenure review could establish a more balanced approach to rewarding the two key faculty activities.

Taking teaching innovation seriously means that pedagogy needs to be part of all evaluations and considerations for advancement. "Innovative teaching pedagogy" might be an added category on Form A for tenure. Outside reviewers might be consulted about teaching as they are for research. Promotion to Full Professor might require excellence in teaching in addition to excellence in research, publication or creative accomplishment.

Establishing better practices for teaching evaluation would provide a stronger basis for rewarding teaching success. Student evaluations provide information about students' perceptions and reactions to the faculty member's methods and practices, but they suffer from a variety of biases that undermine their value as single measure of teaching effectiveness. Investing in methods of classroom exchange and visits, peer and self-evaluation, review of course materials, etc. would round out a more inclusive view of teaching effectiveness. Establishing more comprehensive teaching evaluation practices and providing support for departments to conduct such evaluations would be an important component to rewarding faculty based on teaching performance.

Recommendations:

Investigatory

- Inventory the campus teaching materials/equipment and assess faculty needs.
- Assess the resources available to support faculty use of technology for teaching and faculty members' familiarity with those resources.
- Assess the extent to which interdisciplinary courses/teaching and other collaborative efforts are affected by the RCM model

Action

- Create a strategic vision and plan for "new pedagogies" and communicate it in both visionary and concrete terms.
- Plan a kick-off activity/event. This might be an address to the faculty, a guest speaker, or other public occasion to announce the new initiatives—and the reasons why they are important.
- Allocate funds to support innovation across schools and colleges in rough proportion to the numbers of students they teach. This might be done directly or through competitive funding based on proposals. Practices for resource allocation must be transparent and should include faculty involvement.

- Create a teaching support model—a centralized or decentralized set of resource people for faculty support (technology use, course design, in-class assistance, assessment, coaching, etc.)
- Appoint a "committee on teaching effectiveness" to propose a model for teaching evaluation
- Engage the schools and colleges and the University Senate committees in consideration of the relative importance of teaching and research in the rewards system
- Celebrate all successes.

Campus Conversation with National Experts

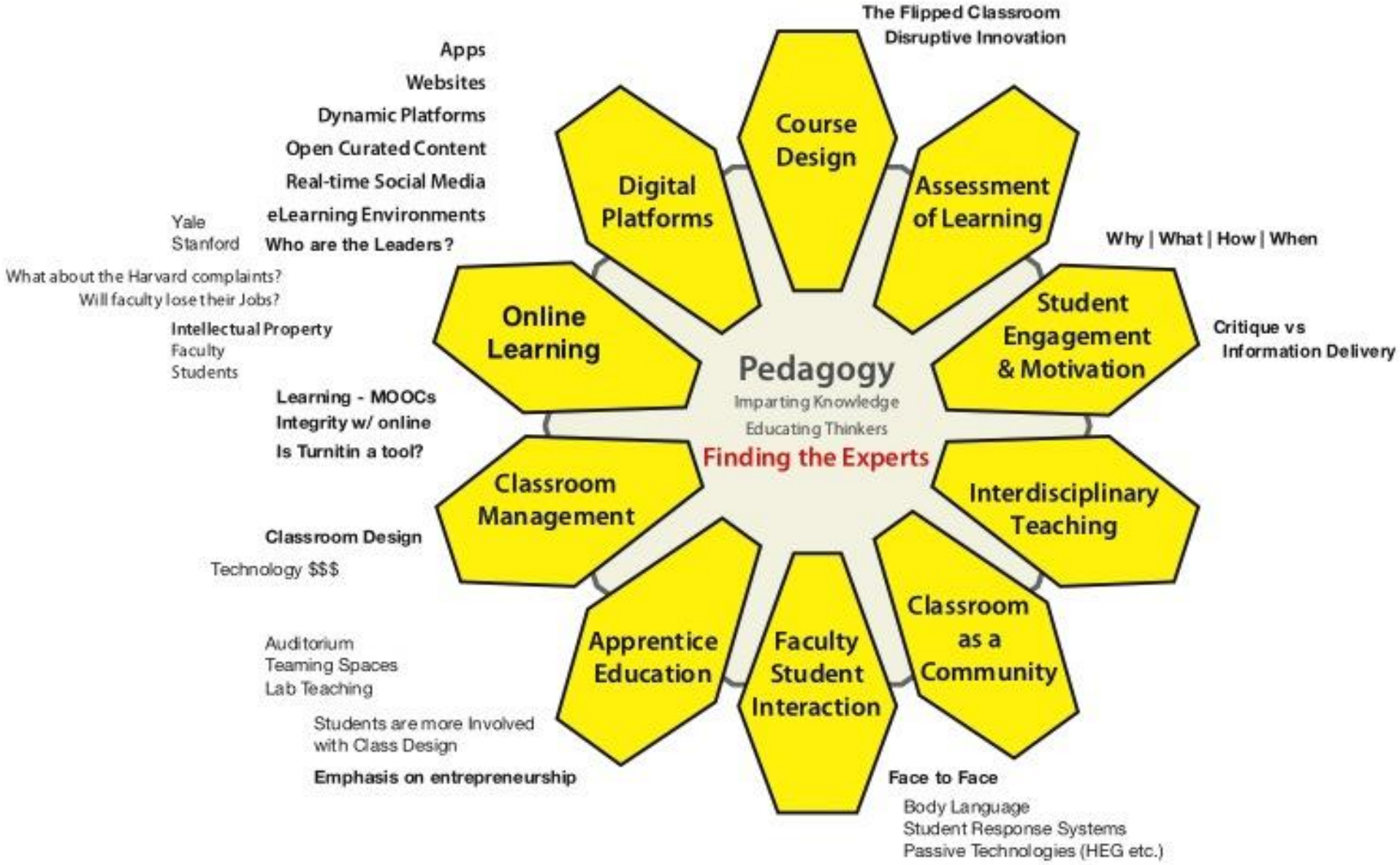
Kofi Okyer, Susan Dischiave, Denise Heckman

Bringing national experts on new pedagogies for teaching and learning modalities to campus provides exposure that will foster new ideas and teaching innovations. In order to facilitate the conversation, first, areas of expertise were identified. Next, a preliminary list of experts was developed. This is not a complete list but merely a starting point. In addition to this list we recognize that experts have been identified from within the Syracuse University (SU) community. Then, mechanisms for engaging the experts have been outlined. Finally, we recommend that an implementation team, from the proposed Center for Teaching and Learning, be created to further develop the plan for a Syracuse University Campus Conversation regarding Advancing New Pedagogies with nationally recognized experts and SU internal experts.

Areas of Expertise

There are many domains that impact learning. Finding new ways or pedagogies in any of these areas will have an impact. Discovering mechanisms to improve multiple domains will have an even greater impact. The following areas have been identified to begin the conversation including:

1. Course design: technology, teaming space, lab teaching, flipped classroom, blended learning
2. Digital platforms
   a. Apps: *Phonics Genius, Cloud Storage, Google Earth, Emodo*
   b. Websites: *Mashable,*
   c. Dynamic Platforms (often featuring user-generated content):
      Blackboard, iTunesU, Learnist
      eLearning Environments**:**
      HarvardX
      Khan Academy, Coursera, edX
   d. Open Curated Content (media collections):
      slideshare, YouTube
   e. Real Time and Social Media:
      twitter, reddit, facebook, Flip Board
3. Online learning
4. Classroom management
5. Faculty-student interactions
6. Student engagement& motivation
7. Interdisciplinary Teaching
8. Apprentice Education/Applied Learning – internships, mocks, etc.
9. Classroom as a community & student collaboration
10. Assessment of Student Learning: What to assess, how to assess, when to assess, etc. Integrity of online assessment. Impact of pedagogy in evaluations


The Flipped Classroom
Disruptive Innovation
Course Design
Digital Platforms
Assessment of Learning
Online Learning
Student Engagement & Motivation
Classroom Management
Interdisciplinary Teaching
Apprentice Education
Faculty Student Interaction
Classroom as a Community
Pedagogy
Imparting Knowledge
Educating Thinkers
Finding the Experts
Apps
Websites
Dynamic Platforms
Open Curated Content
Real-time Social Media
eLearning Environments
Yale
Stanford
Who are the Leaders?
What about the Harvard complaints?
Will faculty lose their Jobs?
Intellectual Property
Faculty
Students
Learning - MOOCs
Integrity w/ online
Is Turnitin a tool?
Classroom Design
Technology $$$
Auditorium
Teaming Spaces
Lab Teaching
Students are more Involved with Class Design
Emphasis on entrepreneurship
Why | What | How | When
Critique vs Information Delivery
Face to Face
Body Language
Student Response Systems
Passive Technologies (HEG etc.)

This is not intended to be an exhaustive list. In addition, since technology is constantly changing, it is required that the list must be reviewed and revised on a regular basis. To facilitate the conversation, national experts in the listed domains have been identified.

Experts

There are both internal and external experts that continue to work in the designated domains. Many internal experts have emerged from the inventory of pedagogical methods survey conducted by the Task Force. Several external experts have emerged from preliminary investigations who continue to work in the designated domains. The experts identified are:

1. ***Clayton Christensen***
   Clark Professor of Business Administration, Harvard Business School
   Area of Expertise:
   Disruptive Innovation

2. ***John C. Mitchell***
   Mary and Gordon Crary Family Professor
   Professor of Computer Science and (by courtesy) Electrical Engineering
   Vice Provost for Online Learning & Professor of Computer Science, Stanford
   Area of Expertise:
   Online Learning

3. ***Amy Collier***
   Director for Technology and Teaching, Office of the Vice Provost for Online Learning, Stanford
   Areas of Expertise:
   Cyberlearning/Online Education
   Course Design
   Teaching Practices
   Classroom Assessment
   Learning Space Design and Utilization

4. ***Sylvia Hurtado***
   Professor and Director of the Higher Education Research Institute, UCLA
   Areas of Expertise:
   Student Educational Outcomes
   Campus Climates
   College Impact on Student Development
   Diversity in Higher Education

5. ***Alice Kolb***
   President of Experience Based Learning Systems, Inc. (EBLSI)
   Adjunct Professor of Organizational Behavior, Weatherhead School of Management, Case Western Reserve University
   Areas of Expertise:

Experiential Learning
Learning Styles and Learning Spaces

6. ***David Kolb***
   Organizational Behavior Department, Weatherhead School of Management, Case Western Reserve University
   Founder and chairman of Experience Based Learning Systems, Inc. (EBLSI)
   Area of Expertise:
   Experiential Learning Theory

7. ***George D Kuh***
   Chancellor's Professor Emeritus & Director, National Institute for Learning, Indiana University
   Area of Expertise:
   Learning Outcomes Assessment

8. ***Rafael Reif***
   President MIT
   Area of Expertise:
   Online Learning, MITx and edX

9. ***Victor Saenz***
   Assistant Professor in Higher Education Administration, UT-Austin
   Faculty associate with the Center for Mexican American Studies
   Areas of Expertise:
   Access, Equity, and Diversity Issues in Higher Education
   Desegregation Issues
   Transition and Retention Issues for Latina/o and First-Generation College Students
   Policy Impacts of Affirmative Action and Remedial Education Policies
   Assessment Issues in Higher Education
   Latino Males in Higher Education

10. ***Jose Luis Santos***
    Assistant Professor, Higher Education and Organizational Change, UCLA
    Areas of Expertise:
    Economic Factors Involved in Higher Education
    Financial issues Related to Higher Educational Policy and Reform
    Issues affecting Students from Underrepresented Groups
    How Finances Influence Equity and Access
    Burden of Student Debt
    Linking Tuition-Setting Policies with Need-Based Aid Policies

11. ***Linda J. Sax***
    Professor of Higher Education in the Graduate School of Education & Information Studies, UCLA
    Faculty Director of the Student Affairs graduate program
    Areas of Expertise:

Gender differences in College Student Development
Assessment of College Impact
Single-Sex Education
The Pipeline for Women in Science and Engineering
Parental Involvement and College Student Development
Impact of Student-Faculty Interaction

12. Robert Darnton

He is Carl H. Pforzheimer University Professor & Director of the Harvard University Library. Founder of the Gutenberg-e program, sponsored by the Mellon Foundation. He is also a trustee of the New York Library.

Areas of Expertise:

History of the book and, more recently, electronic publishing

Biographies of the above experts are available in Appendix B. Additional experts can be identified by issuing a "Call for New Pedagogy Experts". The Center for Teaching and Learning implementation team can further refine the list of external experts by issuing the call. The next step requires developing a way to facilitate the conversation.

Communication Modes

Several proposals were developed for fostering conversations with Faculty regarding advancing new pedagogies. In this document we concentrated on developing a self-sustaining model that will be useful to faculty and the University as a whole in various ways.

These modes include hosting a Tedx conference for SU and affiliated Consortia, implementing a digital library of related pedagogy videos, developing kickstarter type videos, and implementing class “sit-ins” /shadowing opportunities with internal faculty experts.

The first proposal is to host a TEDx conference in order to foster "ideas worth spreading." (https://www.ted.com/tedx). TED is a non-profit organization dedicated to bringing together Technology, Entertainment, and Design. Two conferences, bringing together world leaders, are held each year. A conference may include up to 50 speakers each allotted 18 minutes along with entertainment such as music, comedy, and performances. These conferences usually span 4 days. Additionally, speakers are recorded and their presentations are made available in digital format as TED Talks. Independent smaller conferences, TEDx events, are local, unique, independently developed events that follow a similar format and have several features in common.

- **TED's celebrated format:** A suite of short, carefully prepared talks, demonstrations and performances (live, or just TEDTalks videos from TED.com) on a wide range of subjects to foster learning, inspiration and wonder -- and to provoke conversations that matter

- **TEDTalks videos:** A minimum of two pre-recorded talks from the acclaimed TEDTalks video series (these talks are available free on TED.com) (https://www.ted.com/tedx)

To jump start the conversation and inspire the community, a TEDx conference would be organized to bring as many national experts as possible to SU in a format that would be accessible to all. The implementation team would organize a TEDx conference through the TED network, invite the experts, and host the event. Additionally, we will request that the TEDx participants complete a "kickstarter" video. The TEDx vidoes would then be available through TED.com and a digital library sponsored by the SU Center for Teaching and Learning. The TEDx videos and the "kickstarter" would become the backbone of the new pedagogy digital collection.

Flash Talks or Kickstarter Videos

Short videos will be produced and made available through the SU Center for Teaching and Learning. Initially, these videos will be made by the national experts and SU faculty who present at the TEDx conference. In the future, they will be continually added to by faculty who are identified by the Task Force and / or the implementation team. A kickstarter video is a short 2 minute introduction that highlights a new pedagogy, and then shows classroom interaction or student feedback. The entire video would be limited to 15 minutes. A simple script should be developed by the implementation team that provides a framework for the videos. A sample script could be a simple as:

- Tell us who you are
- Tell us the story behind your new pedagogy.
- Explain the goals
- Talk about why it works

In addition to national experts, SU has numerous internal experts that should be included in the "kickstarter" style videos. The internal experts highlighted in the videos would also allow other faculty to "sit-in" on a class to experience the new pedagogy first hand or be available to other faculty to answer questions.

Sit-Ins/Shadowing

One way to take advantage of local expertise is to permit faculty to "sit-in" or shadow faculty that are implementing new pedagogies. The goal is to allow those that have found effective techniques to share and inspire faculty that are interested in learning. Procedures and incentives for faculty need to be in place. Many of the details for implementing and sustainability must be worked out. This process needs to be iterative and maintainable. An implementation team, therefore, must be created to facilitate and maintain the conversation.

Implementation

An implementation team would be required to facilitate the conversation. This team should be organized by the proposed Center for Teaching and Learning. The team would:

1. Work with the Administration and the TED organization to develop and implement the TEDx conference
2. Refine and expand the list of external experts
3. Organize the experts visits
4. Advertise the TED event internally and externally
5. Develop the script for the "kickstarter" videos
6. Include innovation specifics as part of the assessment for future additions.
7. Identify the list of internal experts
8. Work with the Center for Teaching and Learning and IT to implement a digital library of advancing new pedagogy videos (internal use and external use)

Conclusion

Developing a process for the University that can bring national experts into the conversation requires identifying the areas of expertise as well as a list of nationally recognized experts. It is also important to recognize local experts. Given that new pedagogies are constantly in flux, facilitating an on-going conversation requires that the University develop and maintain good internal communication mechanisms that will inspire and encourage Faculty to get and stay involved. A TEDx conference, "kickstarter" style videos, "sit-ins" along with developing and maintaining a digital library of new pedagogy videos will provide open access to the tools and techniques.

This University culture will then be shared with potential students and the public at large to identify Syracuse University as place where *teaching* can coexist with research.

An implementation team and incentives must be in place for this important conversation regarding new pedagogies for teaching and learning modalities to get started and maintain momentum but we feel that this model will not only sustain itself but will help uncover and encourage the *art of teaching* as an ongoing discussion with faculty throughout the campus.

Consortia

Liz Liddy, Chair, Steven Diaz, Steven Hoover, Jonathan Massey

Overview

The Sub-Committee on Consortia was charged with exploring the potential role that university consortia could play in providing additional opportunities for our students; how consortial membership and participation might provide strategic opportunities for Syracuse University to enhance its areas of strength and mitigate areas of weakness or disinvestment, and; what types of consortia might be most beneficial for the University to participate in.

Our working definition of a consortium is a multi-institutional partnership for sharing courses and other resources, allowing a university to expand or maintain broad course offerings and research opportunities while pursuing specialization in only a subset of those areas. Consortia can operate at different scales, from department, to school / college, to the entire university. Distinct kinds of consortia can impact teaching by:

- using online education to share teaching and research resources, often at large scale;
- enabling global exchanges and interactions among students and faculty; and
- sharing offline resources locally.

We see three major roles for consortia:

- achieving economies through resource-sharing via online course offerings, library holdings, data sets, and other resources;
- maintaining and expanding access to specialized teaching and research hosted at Syracuse and elsewhere;
- enhancing institutional prestige by affiliating with leading institutions globally to create signature opportunities for study and research.

We recommend:

- using strategic consortium affiliations to expand access to specialized learning opportunities for our students, and to expand the audience for specialized courses by our faculty;
- following through on the conversation that has begun amongst the Provosts of the Colonial Group for the member universities to form a consortium for sharing of online courses;
- affiliating with elite and dynamic institutions globally to create signature transnational exchanges among students and faculty;
- encouraging individual schools and programs to explore, experiment, and share results of consortial membership in their own subject domain with other SU schools;
- adopting uCosmic or other means for information-sharing so that academic units can learn from one another's consortial experiences;

- continuing to experiment with offering MOOCs independently by individual schools;
- joining edX as soon as necessary arrangements can be made;
- sharing all of these plans conversationally with the full SU community.

Introduction

Consortia are multi-institutional partnerships for sharing of courses and other resources. They allow a university to expand or maintain broad course offerings and research resources while pursuing specialization and advanced research in only a subset of those areas. They can operate at multiple scales, from the department or college / school to the university-wide, and they can yield cost savings by reducing duplication of offerings and services among institutions, as consortia diminish the need to employ faculty or adjuncts for low-enrollment, highly-specialized courses. They can also open opportunities for study in global contexts, whether through study abroad or online learning.

Types of Consortia

Local consortia typically encompass several smaller institutions near one another. They can expand student access to courses and resources by permitting cross-registration, leveraging limited resources by avoiding duplication of academic offerings and back-end administrative activities, and enhance brand recognition by consolidating a regional profile. Syracuse University is part of the Mellon Central New York Humanities Corridor (SU, Cornell, University of Rochester, and a few small liberal arts colleges) and has affiliations with ESF, Le Moyne, and other local / regional institutions at various levels.

National consortia typically have a larger membership drawn from across the country, linked by one particular shared element in their institutional profiles. That shared element could include such factors as denomination, research funding level, disciplinary focus, or mission focus. Both the University as a whole and individual units of the University currently participate in such consortia. A potential model for sharing resources and promoting specialization in key focus areas can be found in long-standing library consortia such as the Orbis Cascade Alliance, NELINET, and the California Digital Library.

Global consortia are not necessarily different from national consortia, but they more often fold in considerations distinct from those of most national consortia, including the goals of intellectual and student exchange across divisions of nationality, culture, language, and degree of development.

MOOC Consortia are a quickly emerging consortia model dedicated to redefining higher education through Massively Open Online Course (MOOC) offerings where tuition is typically not paid, nor academic credit earned. However, the MOOC landscape is quickly evolving, as various MOOCS are redefining their business models. Best known amongst the MOOCs are Coursera, Udacity, edX, and the

Western Governors University. It should be noted that one does not have to belong to a consortium to offer a MOOC, as demonstrated by the iSchool, which has now offered two MOOCs on its own.

It is difficult to form a comprehensive picture of the current consortium activity across Syracuse University as many consortial agreements take the form of a memorandum of understanding (MOU) at the departmental or school / college level. Estimates are that there are hundreds of such MOU, some at each of the levels described above.

Established National Consortia

Committee on Institution Cooperation (CIC)
This university level academic consortium of 15 members is perhaps the best known amongst national non-MOOC consortia. Syracuse University is not currently a member of CIC. In December 2005, the CIC Deans of Liberal Arts & Sciences launched an effort to establish a voluntary, systematic method of sharing courses across the curriculum to enhance access to specialized graduate and low enrollment offerings for all participating CIC universities and their students. The result was CourseShare.

The CourseShare initiative has focused primarily on offerings that can be "technology facilitated" to eliminate barriers of time and distance. Almost 112 courses have been shared since the beginning of the pilot, including more than two dozen less commonly taught languages (LCTLs) and graduate seminars in American Indian studies, Asian American studies, Chemical Informatics, English, History, Political Methodologies, and Speech & Hearing Sciences.

According to a 2008 evaluation report, CourseShare has succeeded because CIC institutions have invested in the project; faculty and departments have embraced the opportunity for collaboration across institutions, and; supportive processes have been carefully developed. Faculty interest in sharing courses has increased more than 25% and the number of shared courses has increased with each successive year of the pilot. Deans, faculty, registrars, technology staff, and many others involved with CourseShare at the CIC campuses have been working together successfully and have developed processes to make course sharing logistics easy and efficient. Planning has begun for the next phase of CourseShare (CourseShare 2.0) which will continue the growth of courses in the Arts & Sciences and also expand course sharing to disciplines campus-wide.

WISE Consortium

An example of a school / college based consortium, is the Web-based Information Science Education (WISE) Consortium, which is comprised of 16 member Library and Information Science US university programs, that has operated successfully from all partners' views since 2005, and has detailed management and financial models it is willing to share. Using an exchange model, host schools open up those online courses in which they predict they will have empty seats to students from

other WISE member schools. These opportunities are shared in advance of each semester via the WISE website, and the 'teaching' school has the right to set the size of the class. Credit is granted through the student's home school, via registration in a Special Topics course.

The financial model is as follows: Member schools contribute $3,000 annually to cover core operational costs including a part-time staff member, and necessary central technology. Students pay their home school tuition rate for enrollment in a WISE course. To balance the exchange of students, home schools are charged $100 per student taking a WISE Consortium course, and the teaching school receives $100 per WISE student accepted. However, it is entirely possible to conceive of a similar school / college based consortium with a different financial model.

Potential National Consortia

For future potential consideration, the following two multi-university organizations to which Syracuse University currently belongs or will belong offer great potential, and efforts to gain the benefits of consortium relationships should be pursued.

Colonial Group

An established Association of 14 US universities (see Appendix C for listing), including Syracuse, that currently share data and ideas at the provost level and via institutional research offices. Discussions regarding instructional collaboration via a consortium are under way, with a current focus on sharing areas of strength and identifying areas of need at each campus. It is believed that CIC is an excellent model of a national consortium that is and has been functioning well for the member schools and could well serve as a guide for moving forward with the Colonial Group. The Task Force suggests that focused attention at the University level be paid to following through on the online course or MOOC opportunity with the Colonial Group.

Atlantic Coast Conference (ACC)

While there is potential for academic consortial sharing in the future amongst the impressive universities who are members of the ACC, an inquiry by Dr. Eileen Strempel found that there is currently no academic consortium, nor a support structure for such currently in place.

Global Consortia

One role for consortia is to expand the range of opportunities for study abroad and international student or faculty exchanges. Consortial arrangements can leverage and complement our substantial array of global centers and programs by drawing participants from other institutions and by expanding opportunities for our students and faculty. SU Abroad is an ideal starting point, as is Associate Provost Margaret Himley's 'Parsing the Global' Task Force.

In addition to, or as an alternative to, joining a global consortium as a single member, many universities form regional consortia to sponsor study abroad programs and to partner with overseas universities. Syracuse has participated in a few varieties of this type of consortium. For instance, with Colgate University and Hobart & William Smith Colleges we co-sponsored a program hosted by the Pontificia in Santiago in the Dominican Republic. SU is also currently considering a partnership with Le Moyne to accommodate global opportunities.

Such arrangements are particularly effective at creating opportunities for a small number of students to participate in a specialized research project. Some examples worth noting are:

- Boston-based School for Field Studies which organizes five-year projects with communities and organizations in Africa, Costa Rica, and other locations. Students rotate into these ongoing initiatives as they might into an archeological dig. While the School for Field Studies was initiated by Boston University, it now runs independently.
- Syracuse was, for a time, a member of the Organization for Tropical Studies, a similar quasi-independent consortium (sponsored by Duke University) that provides scientific research opportunities for students outside of the US.
- Similar opportunities offered outside of a consortial structure include those at University of Queensland, which offers a distinctive program by hosting semester-long study abroad students and offering the option to stay on for a second semester as a paid intern working with faculty on research projects.

For these global consortia, in order to address tuition rate disparities, students typically pay their home tuition to their home university, along with a program fee, and the universities either all pay the same rate to the program provider or they work out an exchange system. Participating institutions typically pay an annual fee to be part of the consortium, and administrative leadership either rotates among the institutions or is permanently hosted by the initiating school.

Further information sources available on global consortia programs include:

- NAFSA, a membership organization focused on international exchange among students and scholars;
- Forum on Education Abroad, a large consortium of universities and associations, which "promotes best practices and excellence in curricular design, engages in data collection and research, conducts program assessment and quality improvement, and advocates on behalf of its members and the field of education abroad."

Many of the initiatives described above operate at a scale between an inter-institutional MOU and a full-blown consortium. Some of the best opportunities for student and faculty exchanges lie in discipline- or subject-specific affiliations and

consortia such as the one that Shere Abbott, Vice President of Sustainability, is creating among universities and other partners focusing on sustainability, including the ECS / Architecture / COE association with Nanjing University, on the subject of indoor air quality.

For an overview of globalization initiatives in higher education that includes discussion of such partnerships and affiliations, see Richard J. Edelstein and John Aubrey Douglass, "Comprehending the International Initiatives of Universities: A Taxonomy of Modes of Engagement and Institutional Logics," Center for Studies in Higher Education research paper CSHE.19.12 (December 2012), or a summary at *Inside Higher Ed*.

UCosmic

As mentioned previously, a sizeable number of MOUs are currently in place between schools and colleges at Syracuse and both internal and external partners. MOUs are related to consortial arrangements in that they outline areas of agreement and cooperation in academic matters. However, such MOU information is difficult to share because it often contains financial data and other proprietary information. A potential solution may be that the university is considering purchase of a license for UCosmic, a software platform that would allow the sharing of the kind of data we are interested in sharing, while protecting proprietary data.

MOOCs

Massive Open Online Courses (MOOCs) are the newest, largest, and fastest growing type of consortia, and one that the University leadership and several SU schools have been seriously investigating and experimenting with. MOOCs are aimed at providing large-scale interactive participation and open access to courses via the web to any interested individual. In addition to traditional course materials such as lecture videos, readings, and problem sets, MOOCs also provide interactive user forums that help build a community for the students, professors, and TAs. While MOOCs were initially introduced as non-credit bearing, there have since been various options developed whereby credit can be earned.

Many resources are available for learning more about MOOCs, from the popular press to the Chronicle of Higher Education. MOOCs are a very active area of both conversation and emerging business models. Along with the supporters, there have also been many nay-sayers, including some current faculty. Even amongst those who are supporters, the basic issues that they realize must be addressed are: whether faculty are pedagogically and technically prepared to offer high quality MOOC courses; and if not, what would the time and resource requirements be to get them prepared, and; whether it is truly a bottom line benefit to their university in terms of long-term revenue increase due to a heightened reputation gained via wider exposure of potential students to their university via MOOC courses.

There are many acknowledged advantages and concerns regarding MOOCs which need to be discussed openly by the highest academic levels of the university. In the

same way that this year's cross-campus talks by the Chancellor and Provost opened minds and generated necessary conversations, it is felt that a similar campus-wide communication of the University's plans for both online for-credit Consortia and MOOC Consortia would be optimal, either via in-person or email conversations with all faculty and staff, in order to gain optimal level buy-in.

Some of the positive aspects of MOOCs from an institutional perspective are that they provide strategic partnerships with aspirational peer institutions nationally and globally, which enhances reputation and brand recognition, and; they have the potential of serving as a recruiting venue for students at high school, college, and graduate levels.

Some of the challenges are that the offering schools need faculty who are prepared, or willing to be prepared, to teach via this mode. Also there are significant start-up, as well as ongoing administration and infrastructure costs, for both online and MOOC modes, as they require appropriate pedagogy, technology, and support of both faculty and students in the courses. Another concern is how to motivate a sufficient number of faculty to develop and teach MOOCs so that we would be seen as a substantial partner in a national MOOC consortium – an issue that is addressed by the Task Force's Sub-Committees on Incentives.

The Consortia Sub-Committee believes that SU should offer MOOCs, and to do so we should both join edX, one of the well-known national MOOC consortia, as well as permit interested faculty who wish to go it alone to do so using CourseSites, Blackboard's platform specifically for MOOCs. In conversation with edX we learned they are completely comfortable with this. In addition, we see the strong possibility that the edX platform will eventually be one on which the University can provide both its for-credit online courses, as well as its MOOC courses, which would be an optimally efficient mode to pursue.

Obviously information is not lacking regarding the various MOOCs currently available, and while full in-depth review and consideration of the 3 current major opportunities (Coursera, Udacity, and edX) has not been fully accomplished, both the available literature on edX, combined with the views of the 7 representatives of SU who held a 3 hour meeting with the leadership of edX, lead to the Task Force's recommendation that the University proceed with serious contractual discussions with the edX leadership. Multiple reasons exist for recommending edX specifically, some of which are: their transparency into their partnerships and business models with other universities; willingness to adapt to the needs of partners; the above-stated potential for the edX platform to support both MOOCs and for-credit online courses; the ability for us to choose between supported and stand-alone packages, and; the ability for SU to sign a short-term agreement.

Simultaneous with signing this agreement, the highest academic levels of the University need to fully share the potential cost / benefit impacts of this decision fully with the SU community. In the meantime, the most eager pursuers of MOOC opportunity at Syracuse should be encouraged to experiment with offering MOOCs

even before joining edX. In addition, the University is encouraged to work with the Senate on what needs to be shared with that body regarding MOOC offerings.

Consortia Sub-Committee Summary

Bottom line, the Task Force believes that consortia of all types have a tremendous potential for positively impacting the quality of Syracuse University's pedagogy – from school-specific, local, national, international, or MOOC-based consortia. It needs to be recognized that a university-wide strategy for any type of consortia course-offering plan would need to reconcile the varying school-by-school profiles and needs, e.g. excess capacity, insufficient capacity, and presence or lack of specific teaching expertise. Similarly, the University would need to deal with the fact that consortium offerings pose a threat to some faculty who fear they may lose their preferred opportunities to teach their more specialized, but low-enrollment courses.

The student, as well as the faculty perspectives, must also be considered here, particularly since the students in a survey conducted by CIC revealed that 27% of students wanted courses not offered at their home institution, but available at other institutions. Access to courses at other top-tier universities also has the potential to provide students access to courses taught by the highest quality instructors on a particular topic, a factor which was one of the initial draws of MOOCs.

Appendix A
Suggested Initiatives for the Center

Master Faculty Program

The center should consider creating a "master faculty" program which identifies faculty who are particularly interested in and adept at creating and teaching technology-enhanced and/or pedagogically unique courses. Master faculty will have particularly strong skills in course design and delivery, and will serve as mentors for their fellow colleagues. Master faculty will meet regularly to share ideas and learn more about technology-enhanced education, deliver special presentations and demonstrations. Master faculty should be recognized with a designation of "teaching scholar" by the provost.

New Faculty Development

As new faculty often need the most developmental support, reaching out through the Center will facilitate creating relationships that benefit new faculty and garner credibility for the Center. New faculty development services could include:

- **Pedagogy Support Orientation Sessions**- sessions at the end of the summer or early in the fall semester at which the pedagogy services of the Center are presented.
- **New Faculty Pedagogy Workshops** - a pedagogy workshop series for new faculty during the semester
- **Mentorship Programs** – Offered in conjunction with the Master Faculty Program, new faculty member could be paired with a senior faculty member outside of the new faculty member's department.

Course Support Models

Faculty developing pedagogically innovative and unique courses and revising existing ones may continue to need support in instructional design and educational technology. Four basic models for course development support should be considered. These models are not mutually exclusive:

1. Start-to-Finish Course Consultant
2. DIY Course Design Resources
3. Multi-expert Development Team
4. Course Production Outsourcing

A principle determinant of the right approach will be the volume of courses to be developed and supported, level of existing in-house expertise, availability of institutional funding, level of faculty skill and interest in developing pedagogically unique courses, and the need to determine the approach (or approaches) most appropriate for each department, school, and college within the University.

Model 1: Start-to-Finish Course Consultant

In this model, a faculty member is assigned an instructional designer who provides support through the entire course design process. Having a single point of contact for faculty will minimize the complexity of navigating support resources, and extended one-on-one attention will allow individual faculty to customize each course according to his or her content and teaching preferences.

When intensively resourced, this model will be highly attractive to faculty and, by extension, the University, as it prepares to make substantial investments to gain faculty support for pedagogical innovation. The costs of this model will shift upward or downward dramatically based on the length of the course production period and the number of courses and faculty members each instructional designer supports concurrently.

Model #2: DIY Course Design Resources

In this model (essentially what currently exists), faculty would access answers to basic questions through a website with a searchable database of step-by-step guides, tutorials, templates, and best practices; one-on-one assistance from instructional designers and educational technologists would be assigned by appointment to faculty who need specialized and highly technical support.

Reserving one-on-one support for special requests would allow the University to substantially reduce the overall cost of course production while providing faculty with access to a team of highly specialized experts in instructional design, multimedia, graphic design, programming, and educational technology.

Model #3: Multi-expert Development Team

In this model, responsibility for course content and ultimate authority over course design would remain with the faculty member but responsibility for managing the creation of the course would shift largely to a lead instructional designer from the Center who would facilitate collaboration between the faculty member and a team of course development staff. Large scale implementation of this model, being expensive, would be considered on a case by case basis. If such a large scale investment involved fully online, revenue-generating degree and certificate programs expected to compete with other institutions' offerings and generate new enrollments for the institution, the University would make the additional investment to guarantee a consistently high course production standard and to ensure that these courses are competitive and completed according to the schedule for program launch.

Model #4: Course Production Outsourcing

In this model, the Center would facilitate University partnering with a vendor who would provide all course production support in exchange for a percentage of tuition revenue from the resulting courses. In many cases, the vendor will also assume responsibility for marketing the program and enrolling students, as well as providing web-only versions of the academic, student, and financial services required by fully online students. Such vendor partnerships may be particularly

helpful when the University is attempting to launch full programs in fields where speed-to-market and marketing are critical but lacks in-house expertise in course development. In contrast to other models, this option would require no up-front investment from the University in course development. However, the trade-off for avoiding up-front costs can be significant. Some such contracts have awarded the vendor as much as 65 percent or more of tuition revenue.

Inventory of Current Pedagogy Support Services on Campus

Currently, the University's Office of Faculty Development, University College, and Information of Technology and Services provide teaching and learning support and services to all faculty.

The Office of Faculty Development (OFD) introduces new faculty to the University community and to the Syracuse community. The OFD schedules events with University leaders and illustrates process and procedures used in teaching, scholarly and creative work. The OFD provides consulting on ongoing professional development opportunities for faculty and works with department chairs to recognize and celebrate faculty work through University award programs. The OFD supports faculty integration to campus by coordinating a three-year program of events and activities for new faculty beginning with New Faculty Welcome each August.

University College (UC) provides support and consults on course design, course development and delivery for all faculty. UC provides these services through their Online Support Group, which conducts workshops for individual faculty and groups on online teaching and online course design and development. The Online Support Group maintains a toolkit of online teaching strategies and can assist with the assessment of a class design.

Information Technology and Services' unit Online Learning Services (OLS) provides advising, consulting and self-help information to all faculty on the use of the enterprise learning management system and on the web conferencing tool used for synchronous and asynchronous online course content. OLS provides workshops on learning technologies throughout the year and will also consult on technology enhanced teaching and learning upon request.

Information Technology and Services' unit Learning Environments and Media Production (LEMP) provide advising, consulting, and self-help information to all faculty on the use of classroom teaching technologies and event accessibility services. LEMP also provides instructional multi-media consulting and production.

The Office of Faculty Development, University College and the Online Learning Services group developed a weeklong institute that provides participants an opportunity to explore ways to employ technology in teaching and learning and to share lessons about what works and what doesn't. The institute consists of demonstrations, discussion panels and presentations of works in progress and a showcase of student projects.

Five of our schools/colleges have staff that provide faculty consulting, advising and even production of materials. The staff from these schools work collaboratively with ITS's Online Learning Services and Learning Environments groups to assist with the evaluation and transfer of knowledge on technology-enhanced teaching and learning as well as instructional assistance regardless of whether it is online or place-based.

All of the staff identified below work together on instructional technologies and would welcome the addition of the Center and the synergies that would result from this new partner.

- College of Law - Chris Harrison;
- S. I. Newhouse School of Public Communications - Chris Aliberto;
- School of Information Studies - Peggy M Brown;
- School of Education - Kristen L Flint;
- The Martin J. Whitman School of Management - Peter J Headd;
- University College – Michael Frasciello;
- ITS/Online Learning Services – Michael Morrison, Thomas Downes, Samantha Duncan, and Jeff Fouts;
- ITS/Learning Environments – Mike O'Mara, Elizabeth Moore, Russell Pidsosny, and more

Appendix B
Brief Biographies of External Experts

Clayton Christensen

Clayton Christensen is the Kim B. Clark Professor of Business Administration at the Harvard Business School, where he teaches one of the most popular elective classes for second year students, *Building and Sustaining a Successful Enterprise*. He is regarded as one of the world's top experts on innovation and growth and his ideas have been widely used in industries and organizations throughout the world. A 2011 cover story in Forbes magazine noted that ''Everyday business leaders call him or make the pilgrimage to his office in Boston, Mass. to get advice or thank him for his ideas.'' In 2011 in a poll of thousands of executives, consultants and business school professors, Christensen was named as the most influential business thinker in the world.

Professor Clayton received his B.A. in economics, summa cum laude, from Brigham Young University and an M.Phil. in applied econometrics from Oxford University, where he studied as a Rhodes Scholar. He subsequently received an MBA with High Distinction from Harvard Business School in 1979, graduating as a George F. Baker Scholar. In 1982 Professor Christensen was named a White House Fellow, and served as assistant to U.S. Transportation Secretaries Drew Lewis and Elizabeth Dole. He was awarded his DBA from the Harvard Business School in 1992, and became a faculty member there the same year, eventually receiving full professorship with tenure in 1998. He holds five honorary doctorates and an honorary chaired professorship at the Tsinghua University in Taiwan.

Prior to his academic career, Clayton worked as a management consultant with BCG and helped co-found Ceramics Process Systems, a Massachusetts-based advanced materials company. He has subsequently helped establish many other successful enterprises, including the innovation consulting firm Innosight, the public policy think tank Innosight Institute, and the boutique investment firm Rose Park Advisors.

Clay is the best-selling author of nine books and more than a hundred articles. His first book, The Innovator's Dilemma received the Global Business Book Award as the best business book of the year (1997); and in 2011 The Economist named it as one of the six most important books about business ever written. His other articles and books have received the Abernathy, Newcomen, James Madison, and Circle Prizes. Clay is a five-time recipient of the McKinsey Award, given each year to the two best articles published in the Harvard Business Review; and has received the Lifetime Achievement Award from the Tribeca Films Festival (2010).

Clay has served on the Boy Scouts of America for 25 years as a scoutmaster, cubmaster, den leader, troop and pack committee chairman. He and his wife Christine live in Belmont, Massachusetts. They are the parents of five children and grandparents to five grandchildren.

John C. Mitchell
Mary and Gordon Crary Family Professor
Professor of Computer Science and (by courtesy) Electrical Engineering
Vice Provost for Online Learning and Professor of Computer Science

Research Interests Computer security: access control, network protocols, privacy, software systems, and web security. Programming languages, type systems, object systems, and applications of mathematical logic to computer science.

B.S. Stanford University; M.S., Ph.D. MIT.

Professor Mitchell is the Vice Provost for Online Learning at Stanford University. The creation of this office signals Stanford's dedication to taking a leading role in the field of online education and especially the phenomenon of MOOCs. Besides online learning, Mitchell is interested in the fields of computer security: access control, network protocols, privacy, software systems, and web security. He also has expertise in programming languages, type systems, object systems, and applications of mathematical logic to computer science.

Amy Collier

Director for Technology & Teaching, Office of the Vice Provost for Online Learning, Stanford University.

Provides support for faculty to adopt instructional technology tools in their classrooms; works with faculty one-on-one and in groups to advocate for and implement effective uses of technology in teaching; provides outreach and support for the Cyberlearning / Online Education initiative, helping faculty to implement effective lecture capture and interactive learning inside and outside of the classroom, and; provides expert teaching advice on topics such as course design, teaching practices, classroom assessment, and learning space design and utilization.

George D Kuh
Chancellor's Professor Emeritus & Director, National Institute for Learning Outcomes Assessment, Indiana University
Ph.D. Counselor Education and Higher Education, University of Iowa
M.S. School Counseling, St. Cloud State College, St. Cloud, MN
B.A. English, history, Luther College, Decorah IA

While retired from Indiana University, he continues to actively engage in research and service as adjunct professor at both Indiana University & the University of Illinois. He directs the National Institute for Learning Outcomes Assessment (NILOA) co-located at the University of Illinois and Indiana University, and served as senior advisor to the Strategic National Arts Alumni Project (SNAAP) of which he was the founding director. SNAAP is the first ever in-depth look at the factors that help or hinder the careers of graduates of arts-intensive training high schools and postsecondary institutions. His research interests include assessing student and institutional performance to enhance student success and to improve the quality of

the undergraduate experience. He founded the National Survey of Student Engagement (NSSE) and related surveys for law students, beginning college students, and faculty along with the NSSE Institute for Effective Educational Practice. Between 1994 and 2010 he provided leadership for the College Student Experience Questionnaire Research Program.

He has 350+ publications and several hundred presentations on topics related to institutional improvement, college student engagement, assessment strategies, and campus cultures. In addition to *High Impact Practices* (2008) produced as part of the AAC&U LEAP initiative, his two most recent books are *Student Success in College: Creating Conditions That Matter* (2005, 2010) and *Piecing Together the Student Success Puzzle: Research, Propositions, and Recommendations* (2007). In addition, he has been a consultant to more than 350 institutions of higher education and educational agencies in the United States and abroad.

Rafael Reif
President, MIT

Rafael Reif has served as the 17th President of the Massachusetts Institute of Technology (MIT) since July 2012. Before taking on the presidency, Dr. Reif served for seven years as MIT's Provost.

In this role, he helped create and implement the strategy that allowed MIT to weather the global financial crisis; drove the growth of MIT's global strategy; promoted a major faculty-led effort to address challenges around race and diversity; fostered the emergence of the Kendall Square innovation cluster; helped launch the Institute for Medical Engineering and Science; and spear-headed the development of the Institute's latest experiment in online learning, MITx and edX.

A member of the MIT faculty since 1980, Dr. Reif has served as director of MIT's Microsystems Technology Laboratories and headed the department of Electrical Engineering and Computer Science. An early champion of MIT's engagement in micro- and nanotechnologies, he was instrumental in launching a research center on novel semiconductor devices at MIT, as well as multi-university research centers on advanced and environmentally benign semiconductor manufacturing. For his work in developing MITx, he received the 2012 Tribeca Disruptive Innovation Award.

An elected member of the American Academy of Arts and Sciences, Dr. Reif is the inventor or co-inventor on 15 patents, has edited or co-edited five books and has supervised 38 doctoral theses. In 1993, he was named a fellow of the Institute of Electrical and Electronics Engineers (IEEE) "for pioneering work in the low-temperature epitaxial growth of semiconductor thin films." He received the degree of Ingeniero Eléctrico from Universidad de Carabobo, Valencia, Venezuela, and his doctorate in electrical engineering from Stanford University.

David Kolb, Ph.D.
Organizational Behavior Department, Weatherhead School of Management, Case Western University

Renowned for his work in developing the Experiential Learning Theory, Dr. David Kolb is the author of *Experiential Learning: Experience as the Source of Learning and Development*, and the creator of the Kolb Learning Style Inventory (LSI) and Adaptive Style Inventory (ASI). Other works include, *Conversational Learning: An Experiential Approach to Knowledge Creation*, *Innovation in Professional Education: Steps on a Journey from Teaching to Learning*, *Organizational Behavior: An Experiential Approach*, and numerous journal articles on experiential learning.

David holds a masters degree and doctorate in social psychology from Harvard University. He is the recipient of four honorary degrees recognizing his contribution to experiential learning in higher education. David received the Educational Pioneers of the Year award (with Alice Kolb) from the National Society of Experiential Education in 2008.

Alice Kolb, Ph.D.

Alice Kolb is the President of Experience Based Learning Systems, Inc. (EBLSI) and Adjunct Professor of Organizational Behavior at the Weatherhead School of Management, Case Western Reserve University. She received her Ph.D. from Case Western Reserve University in Organizational Behavior. At EBLSI she facilitates innovation in research and practice of experiential learning conducted by the worldwide experiential learning network. Her current work is focused on promoting learning in higher education through institution building. This work emphasizes approaching an educational institution's development by integrating development of curriculum, faculty, students and resources around a vision and mission that is focused on learning. She has published a number of articles on experiential learning, conversational learning, and artistic learning.

Sylvia Hurtado

Professor and Director of the Higher Education Research Institute at UCLA. Dr. Hurtado has coordinated several national research projects, including a U.S. Department of Education-sponsored project on how colleges are preparing students to achieve the cognitive, social, and democratic skills to participate in a diverse democracy. She is launching a National Institutes of Health project on the preparation of underrepresented students for biomedical and behavioral science research careers. She has also studied assessment, reform, and innovation in undergraduate education on a project through the National Center for Postsecondary Improvement.

Victor Saenz

Assistant Professor in Higher Education Administration and a faculty associate with the Center for Mexican American Studies at the University of Texas at Austin. Prior to leaving UCLA to join the faculty of the University of Texas in 2007, Dr. Saenz was the Assistant Director of Research for the Cooperative Institutional Research Program (CIRP) at HERI. In 2005, he received his PhD from UCLA in Higher Education and Organizational Change with a focus on access, equity, and diversity

issues in postsecondary education. Dr. Saenz was a Spencer Foundation pre-doctoral fellow while at UCLA, where he also completed a Masters degree in Public Affairs (1999) and a Bachelors degree in Mathematics (1996) from the University of Texas at Austin. Dr. Saenz was born and raised in the Rio Grande Valley of South Texas.

Dr. Saenz's web page http://www.victorsaenz.com

Areas of Expertise:

Access, Equity, and Diversity Issues in Higher Education
Desegregation Issues
Transition & Retention Issues for Latina/o and First-Generation College Students
Policy Impacts of Affirmative Action and Remedial Education Policies
Assessment Issues in Higher Education
Latino Males in Higher Education

Jose Luis Santos

Assistant Professor, Higher Education and Organizational Change, UCLA

Assistant Professor of Education José Luis Santos studies the economic factors involved in higher education, placing particular emphasis on issues affecting students from under-represented groups, such as how finances influence equity and access, the burden of student debt, and the importance of linking tuition-setting policies with need-based aid policies.

Recently, Professor Santos launched a research project highlighting the educational trajectories and experiences of military veterans in California's public postsecondary institutions, following a cohort of student veterans to understand their access in college, as well as their persistence rates, degree attainment, graduate or professional school attendance, and labor market outcomes. This project stems from a prior study in which pre-college characteristics of veterans and nonveterans were compared.

The driving force behind Professor Santos' work is his belief that federal, state, and institutional policies may not adequately support increased educational and economic outcomes for traditionally underrepresented students, but rather, may perpetuate inequitable outcomes leading to further stratification.

Prior to joining the faculty at UCLA's Graduate School of Education & Information Studies in 2005, Santos served as a senior institutional researcher and the founding director of the Latina/o Policy Research Initiative (LPRI) in the College of Humanities at the University of Arizona. He also served as an associate of the National Center for Public Policy and Higher Education, a leading state and national policy center.

Professor Santos earned his B.A. in Mexican American Studies, M.A. in Educational Psychology: Measurement & Research Methodology at the University of Arizona, and Ph.D. in higher education economics and finance policy from the University of Arizona's Center for the Study of Higher Education.

Areas of Expertise:

Economic Factors Involved in Higher Education
Financial issues Related to Higher Educational Policy and Reform
Issues affecting Students from Underrepresented Groups
How Finances Influence Equity and Access
Burden of Student Debt
Linking Tuition-Setting Policies with Need-Based Aid Policies

Linda J. Sax

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Areas of Expertise:

Gender differences in College Student Development
Assessment of College Impact
Single-Sex Education
The Pipeline for Women in Science and Engineering
Parental Involvement and College Student Development
Impact of Student-Faculty Interaction

Appendix C
The Colonial Group

- Boston College (Chestnut Hill, MA)
- Boston University (Boston, MA)
- Brandeis University (Waltham, MA)
- George Washington University (Washington, D.C.)
- Lehigh University (Lehigh, PA)
- New York University (New York, NY)
- Northeastern University (Boston, MA)
- Southern Methodist University (Dallas, TX)
- Syracuse University (Syracuse, NY)
- Tufts University (Medford, MA)
- Tulane University (New Orleans, LA)
- University of Miami (Coral Gables, FL)
- University of Notre Dame (South Bend, IN)
- Wake Forest University (Winston-Salem, NC)