

REALIZING STUDENT, FACULTY, AND INSTITUTIONAL OUTCOMES AT SCALE

Institutionalizing Undergraduate Research, Scholarship, & Creative Activity within Multi-Institution Systems and Consortia

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Why Undergraduate Research, Scholarship, and **Creative Activity?**



- · Why has the involvement of undergraduates in research, scholarship, and creative activity (URSCA) with faculty gained national significance?
- Engagement in high-impact practices yields greater educational outcomes for students who participate in them in comparison with those who do not.
 - Research, Scholarship, Creative Work (Unique role)
 - Internships
 - Service and Community-based Learning
 - Global Study and International Exchange
 - Student Leadership
 - Others

Why URSCA? (Cont)



Student Benefits from URSCA

- * Cognitive and Intellectual Growth
 - * Professional Growth and Advancement
 - * Personal Growth and Development

• Faculty Benefits from URSCA

- * Research, Scholarly, and Creative Outcomes
- * Mentoring and Teaching
- Job Satisfaction and Personal Development

Institutional Benefits from URSCA

- Learning Outcomes
- * Faculty Quality and Morale
- * Recruitment and Recognition

Osborn & Karukstis, 2009

Scope of the Workshop **Program** — Institutionalizing URSCA



1996 – present:

- . Offering 1-2 national-level workshops annually, as well as workshops to groups of institutions and/or to individual campuses upon request.
- Participating institutions fund all of their own expenses.
- Several repeat attendees.

2007 – present:

- . Offering several series of workshops in targeted programs funded by the National Science Foundation.
- All institution types are invited to apply to send an institutional
- Served ~450 institutions to date.

Scope of the Workshop **Program** - NSF-funded Efforts



• 2007-2009:

* Offered regional workshops designed for 64 emerging institutions, those that did not have a tradition or culture of campus-wide engagement in undergraduate research. (NSF-CCLI, Type 2 Award)

2010 – present:

- Offering workshops to assist community colleges to develop effective and sustainable undergraduate research programs. (NSF-CCLI/TUES)
- Offering workshops for 6 state systems and public and private consortia to improve the quality of undergraduate education at each of the constituent campuses and within the larger systems/consortia. (NSF-CCLI/TUES, Type 3 Award)

Our Current System/ Consortium Program



- Workshop program for state systems and public and private consortia to $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$ improve the quality of undergraduate education at each of the constituent campuses and within the larger systems/consortia.
- There were two rounds of applications (National-level "Calls for Proposals" in 2010 and 2011, each with pre-proposal and full-proposal
- · Systems/Consortia were selected on the basis:
 - $\ensuremath{\raisebox{.4ex}{$\scriptstyle$$}}$ their need and readiness for participation in the project, and
 - their commitment to system/consortium-level change.
- The program was highly competitive:
 - 24 applicant systems/consortia,
 - 6 selected.

Participant Systems and Consortium



- · 6 systems/consortia
- 75 institutions
- > 300 faculty and administrators
 - * Council of Public Liberal Arts Colleges (COPLAC, 23 institutions) June 2011
 - University of Wisconsin System (UW, 8 institutions) Sept. 2011
 - * California State University System (CSU, 9 institutions) Oct. 2011
 - City University of New York System (CUNY, 11 institutions) April 2012
 - * Great Lakes Colleges Association (GLCA, 10 institutions) July 2012
 - Pennsylvania State System of Higher Education (PASHE, 14 institutions) Sept.
 2012

Workshop Goals



- Provide teams with information on the status and landscape of URSCA at the national level
- Help the each System/Consortium in building and enhancing a culture that supports URSCA, both at the individual institution level and the System/Consortium level
- Assist the System/Consortium and the constituent campuses in articulating goals for institutionalizing URSCA, as well as developing strategies to achieve these goals on each campus
- Help identify common challenges and opportunities among the campuses and help develop an integrated approach, supported by the central office, that will aid in expanding the URSCA capacity throughout the System/Consortium

Workshop Design



The workshop design was deliberately planned to increase the likelihood for sustained change both at the individual institutions and among the System/Consortium.

- Extensive conversation and coordination with each system/consortium to develop a tailored workshop curriculum.
- Focused attention on enabling connections among the system/consortium and the member institutions.
- Self-study completed by each institution and the system/consortium.
- Multi-day format involving team participation from each campus (faculty & a senior-level administrator) and system/consortium leaders.
- Expert facilitators.
- Balance of presentations and breakout discussions.
- Personal interactions and networking.
- Subsequent follow-up and monitoring

Workshop Outcomes



- Each of campus team leaves the workshop with:
 - A customized and action-oriented plan to institutionalize URSCA on their own campus.
 - Support for faculty development through additional programs, services, and meetings.
- The System/Consortium office also develops a coordinated plan to embed and sustain URSCA as a central pedagogical and scholarly endeavor within the System/Consortium.

Workshop Sessions



- Plenary Sessions
- Concurrent Sessions
- Breakout Sessions
- · Meal-time Discussions
 - Topic-based discussions
 - * Discipline-based discussions

Breakout Sessions



- Working with their facilitator, each institutional team develops a strategically focused, customized action plan. The system/consortium leaders do the same, working with workshop coordinators. All will share a summary version of their plan with all workshop attendees.
- Institutional Action plans:
 - Develop a mission statement
 - Develop goals/outcomes:
 - Short-term (1-2 years)
 Medium-term (2-5 years)
 - Long-term (5-10 years)
- Develop specific strategies for achieving their goals
- Identify who will be responsible for implementing strategies
- Identify benchmarks for assessing progress and outcomes
- Plan to communicate with key stakeholders on each campus

Follow-up Activities



- Continuing Facilitator-Team Interactions
- Networking and Interactions with the Broader Undergraduate Research Community
- Follow-up Workshops for each System/
 Consortium and their Constituent Institutions

Follow-up Workshop Goals



- Foster continuing interactions among the system/ consortium campuses, focused on enhancing a culture that supports URSCA.
- Provide support during a critical point in the implementation of campus plans.
- Ensure the long-term and sustainable institutionalization of URSCA within and among the system/consortium campuses.

Follow-up Workshop Outcomes



- Each institutional team and the System/Consortium Office:
 - Reviews and shares the current status of their plans from the initial workshop – progress, successes, challenges – including where they're looking for help.
 - Updates and revises their action plans. Institutional plans should be aspirational, but realistic, and also fully leverage their membership in the System/Consortium.

Follow-up Workshop Design



- · No formal presentations.
- This workshop is designed to be interactive and discussion-based, with the system/consortium institutional teams helping each other wrestle with their own challenges and sharing lessons-learned from their own experiences (with guided assistance from the facilitators).
- System/Consortium leaders and faculty/administrator leaders from other systems/consortia attend, share, and further develop facilitation/leadership skills.

Follow-up Workshops



- * Council of Public Liberal Arts Colleges (COPLAC) June 2012
- * California State University System (CSU) Nov. 2012
- * University of Wisconsin System (UW) Feb. 2013
- * Great Lakes Colleges Association (GLCA) July 2013
- Pennsylvania State System of Higher Education (PASHE) Sept. 2013
- * City University of New York System (CUNY) Nov. 2013

Lessons Learned to Date

Campuses



- Leadership at all levels is critically important.
- Workshops were effective at energizing participants almost every workshop participant indicated an intention to take action to achieve their URSCA goals.
- Respondents also indicated, without exception, that:
 - they intended to share the information they had acquired at the workshops with other faculty and/or administrators on their campuses,
 - their team had developed a workable institutional action plan, and
 - they were clear about the steps they would need to take in order to implement the plan on their campuses.

The key implementation strategies cited as most effective



- · Curriculum changes to incorporate/integrate URSCA
- · Identifying new sources of funding
- Establishing a campus-wide URSCA office and/or URSCA Committees
- · Providing incentives for faculty involvement
- Marketing and communication with the campus community (advocacy)
- Engaging campus administrators and motivating them to include URSCA in campus planning and budgeting
- · Integrating URSCA into faculty workload
- Faculty development (e.g., workshops on implementing URSCA)

Strategies Considered Most Challenging to Implement



- · Integrating URSCA into the curriculum
- · Changing faculty workload to accommodate URSCA
- Establishing a campus-wide URSCA office
- · Looking for external funding
- Incorporating work with URSCA into faculty incentives for promotion or tenure
- Top-down planning

With the exception of top-down planning, all of these strategies were cited as essential for effective institutionalization of research!

Lessons Learned to Date Systems/Consortia



- Workshops were seen as a valuable opportunity for the attending teams to hear from others about ways to tackle various URSCA implementation issues, particularly how to be innovative with scarce resources.
- Information sharing (as advanced by the workshops) is seen as critical in uncovering local challenges that are unique to each campus.
- URSCA implementation progress varies a great deal among the campuses in each of these systems. Some campuses are reasonably far along and have URSCA embedded in their culture; other campuses are just starting.

Lessons Learned to Date Systems/Consortia



- Challenges for system/consortium level administrators include:
 - Getting accurate information about the status of URSCA on different campuses.
 - Configuring assistance to match widely varying campus needs.
 - Determining how to get widely different campuses to share a reasonably consistent vision for URSCA.
 - Maintaining a shared vision when personnel change at both the campus and system levels.

Summative Phase Scope and Goals



- Using the lens of institutionalizing URSCA within the participating systems/consortia, this phase of the project is helping to develop a better understanding of the processes and the most effective drivers of organizational and culture change, so these drivers can be implemented for other systems/consortia.
- To explore these issues, we expanded our evaluation efforts by engaging additional experts to assist in the evaluation of organizational and culture change at the six systems/consortia.
 - Jane Wellman and Rebecca Martin, National Association of System Heads and Delta Cost Project
 - Charles Blaich and Kathleen Wise, Center for Inquiry in the Liberal Arts at Wabash College.

Summative Phase Scope and Goals



- Performing culture audits of each of the six systems/consortia participating, and representative member-campuses.
- Collecting and reviewing key assessment tools and data from each system/consortium and representative member-campuses.
- Holding a Summit meeting in March 2014 that will bring together the system/consortium leaders, as well as two-person teams from member-campuses from each of the six systems/consortia.
 - provide extensive networking and exchanges of information between and among all six systems/consortia and the member-campuses.
 - help contextualize and validate what we have learned about organizational and culture change within the systems/consortia.
 - help identify ways that we can continue to assist systems/consortia in sustaining the institutionalization of URSCA.
- · Results and recommendations will be published.

Acknowledgements



CUR thanks:

- The many talented and dedicated faculty members and administrators who have served as workshop facilitators
- The many institutions and their faculty and staff members who have served has workshop participants and hosts
- The national leaders who serve on our advisory board
- The National Science Foundation for its generous support and advocacy of undergraduate research

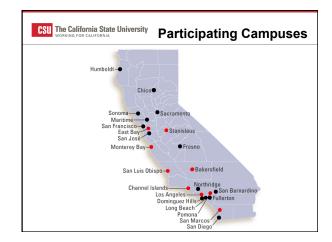


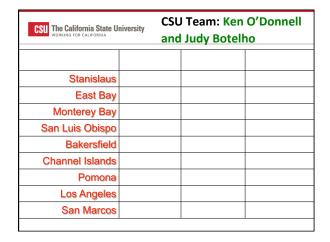
Case Studies

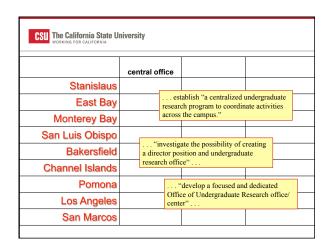


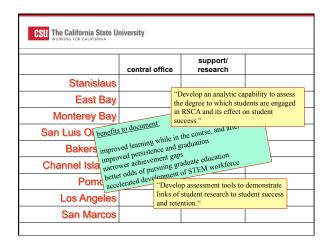
- · California State University System & CSU-San Marcos
 - Gerardo M. González , Dean of Graduate Studies and Associate Vice President for Research, California State University—San Marcos
- Council of Public Liberal Arts Colleges & Eastern CT
 - Rhona Free, Vice President for Academic Affairs, Eastern Connecticut State University

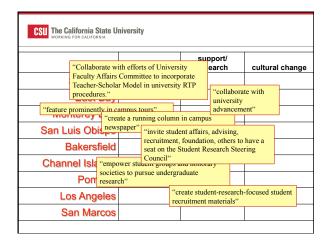




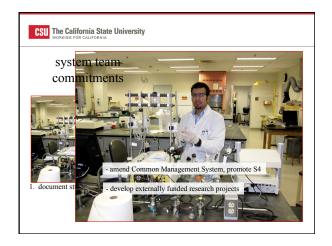


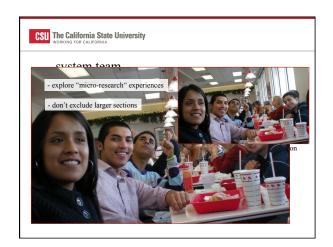


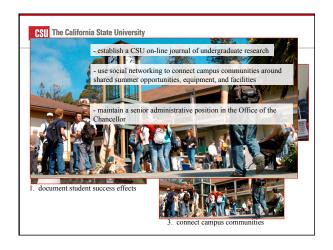




The California State University WORKING FOR CALIFORNIA			
	central office	support/ research	cultural change
Stanislaus			x
East Bay	х	x	
Monterey Bay		x	
San Luis Obispo			х
Bakersfield	х		
Channel Islands		х	x
Pomona		х	х
Los Angeles	х	х	
San Marcos	х		









As the CSU system moves forward with institutionalizing undergraduate research.

What are individual CSU campuses doing?

Case in point...





CSUSM: Campus Background

- First offered upper-division courses in 1990-91
- In 1993 moved campus from a commercial/industrial park to 304 acre location that was originally a chicken ranch
- Accepted first year students in fall 1995
- Enroll 11,300 students (9389 FTES) and offer 28 undergraduate degree programs, 13 master's degree programs, and 1 joint doctoral degree program
- Minority-Serving Institution
 - HSI (31% Latino) and AANAPISI (12%)
- Active in CUR Institutional Development Activities
 - 2008 NSF CUR Institute, 2008 CUR CSU Workshop, 2011-12 CUR CSU STEM Program, 2013 Creative Inquiry Arts & Humanities Workshop



ACTION PLAN – SHORT-TERM GOALS

- Strengthen <u>our campus administrative and organizational infrastructure</u> for faculty-mentored undergraduate research (UGR), such as <u>establishing a centralized undergraduate research</u> office with a director to coordinate activities across the campus
- Develop <u>benchmarks (e.g., baselines and metrics) for</u>
 <u>assessing student learning outcomes</u> and gather data to
 track and report outcomes associated with UGR
- Pursue external resources to support undergraduate research and obtain faculty resources, and to secure equipment/ facilities to enhance our physical infrastructure



SAN MARCOS Institutional Accomplishments

 ✓ Instituted the CSUSM Committee for Undergraduate Research (CUGR)
 ✓ Broad buy-in from diverse disciplines



- ✓ Established an Undergraduate Research Faculty
- ✓ Provided leadership for CSU task force charged with developing a CSU undergraduate journal
- ✓ Increased UGR activity and success
 - ✓ CSU Statewide Competition
 - ✓ CSUSM Student Research Poster Showcase



SAN MARCOS Funding/ Resource Progress

- ✓ Increased support for CSUSM undergraduates to present research at professional or scientific meetings
- ✓ Secured philanthropic support for UGR Faculty Fellow
- ✓ Increased external grant funding to support undergraduate research
 - ✓ NIH MARC, RISE, and Bridges (OTRES)
 - ✓ NSF LSAMP (CSU Collaborative project)
 - ✓ NSF REU proposals
- ✓ Collaborated on an NSF research project to study the impacts of UGR on student outcomes across the CSU ✓ Endorsed by 22 CSU campuses



Institutional Challenges

- · Intensive faculty workload
- Equivocal UGR expectations for faculty
- Limited infrastructure to support student research
- Lack of a dedicated office for student research
- Lack of long-term sustainable funding
- · Limited student outcome data



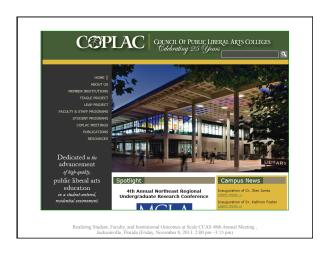
CSUSM CUGR Aspirations

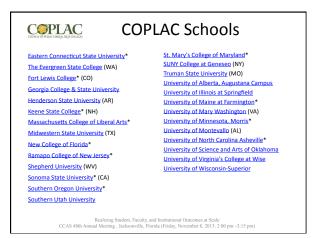
- Clear written expectations for faculty efforts on undergraduate research activities in retention, tenure, and promotion (RTP) standards and policies
- Assessment of undergraduate research activities and outcomes
- Consistent communication or contact with faculty and campus leaders across the CSU
- Coordinated and dedicated campus and systemwide support for undergraduate research















The CUR/COPLAC Project: Institutionalize undergraduate research, scholarship, and creative activity

Consortium-level sharing of best practices in UR and plan for institutionalization

- Meeting of teams (4 administrators and/or faculty members) at UNC-Asheville in 2011
 - Workshops, professional development
 - Develop action plans
- 2. Reconvene teams at UVA-Wise in 2012
 - Review progress on action plans
 - Plans for next steps
 - Sharing best practices



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Beyond CUR: COPLAC's Initiatives to Institutionalize UGR Across Campuses

- AAC&U Leap State Designation
- · Teagle Grant
- Regional Undergraduate Research Conferences
- Journal of Undergraduate Research and Creative Activity

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AAC&U LEAP State

In May 2012, the Council of Public Liberal Arts Colleges (COPLAC) entered into formal partnership with AAC&U's signature national program: Liberal Education and America's Promise or LEAP.

The COPLAC LEAP Partnership

- Collecting and sharing institutional practices, resources, and expertise through face-to-face meetings and through a web-based portal on the COPLAC web site;
- Exploring the potential to share faculty expertise in mentoring undergraduate research students across the consortium using distance technology; and
- Sharing best practices in the assessment of undergraduate research, both in terms of student learning and the application of new knowledge.

The project will be led by campus leaders in collaboration with the COPLAC office. This LEAP Partnership website includes an overview of undergraduate research practice at member institutions, a report on 2012–2013 campus projects related to undergraduate research, and a resources page where institutions can share expertise and request consultancy services.

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TEAGLE FOUNDATION PROJECT

Eleven COPLAC campuses will design, implement and evaluate a twoyear pilot project for "high impact" faculty-mentored undergraduate research at the consortium level. Specifically, the consortium seeks to enhance student learning by sharing disciplinary expertise across campuses in a 'distance' mode and re-envision faculty work and encourage institutional efficiencies at predominantly undergraduate, teaching institutions in the public sector.

The two-year project will explore:

- the extent to which there is student and faculty interest in this mode of education;
- the quality of the distance mentored experience compared to traditional face-to-face mentoring;
- · the technical challenges and costs involved; and,
- · the implications for faculty work.

Realizing Student, Faculty, and Institutional Outcomes at Scale







•The "Century America" Project is funded by the Teagle Foundation of New York and will focus on COPLAC member campuses founded before 1914, the year when World War I began in Europe.

America" Project

•Students complete guided research on their home institutions and contribute to the building of the multi-campus digital "Century America" site.



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UGR at Eastern



- History of Experiential Education
- 2008 Strategic Plan
- CUR/COPLAC project



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Outcomes of CUR/COPLAC project at Eastern: Sharing of Best Practices



- Workshops: what works on other campuses
- Sharing, updating and reporting on action plans
- Raising expectations for quality of work



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Outcomes of CUR/COPLAC project at Eastern: Institutionalization



- · Institutionalization of **UGR**
 - UGR coordinator
 - UGR Council
 - UGR budget
 - UGR summer program
 - Exemplary program funding
 - UGR Mentor Award
- · Liberal Arts Work
 - Transcript designation

Outcomes of CUR/COPLAC project at Eastern: A Broader Definition of UGR EASTERN



- Liberal Arts Works
 - Creative Activity
 - Internships
 - Co-ops
 - Service Learning
 - Campus Leadership
 - Field Work (Social Work, Education)
 - Undergraduate Research



Outcomes of CUR/COPLAC project at Eastern: New participants



- · Digital humanities project
- · Links to faculty researchers across campuses
- · Additional departments participating
- · Greater credibility among faculty



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Outcomes of CUR/COPLAC project at Eastern: Efficiencies



- Journal submissions
- · Regional Undergraduate **Research Conferences**
- · Distance mentoring



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Challenges

COPLAC: consortium level

- Geographically diverse campuses
- Campuses with different levels of funding challenge
- Funding to bring campuses together: interest of funders changes

Eastern: campus level

- · Fitting UGR and LAW activities into faculty workload
- · Fitting UGR and LAW activities into students' full-time credit load

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UGR: Where we are going



Institutionalization

- LAW
- Exemplary Program
- Funding
- Work with COPLAC institutions
 - Digital
 - Exchanges
- Summer program
- Global field

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