

## **NEXT GENERATION LEARNING CHALLENGES**

**DUE NOVEMBER 19, 2010**

Short Title: Academy eLearning

### **Project Team:**

PI: Kathy Fernandes, Director of Academic Technologies, CSU Chico

Co-PI: Ellen Junn, Associate Provost & Interim Senior Academic Technology Officer, CSU Fresno

Co-PI: Hye Ok Park, Director of eLearning, CSU Pomona

### **Q4. Briefly describe your proposed project and how it relates to the NGLC challenge areas. (completion, persistence, content mastery, mastery of deeper learning outcomes) 5,000 characters maximum**

Our proposed project **scales** the Academy e-Learning (AeL) program developed by California State University, Chico (CSU Chico) for **adoption** by 2 other CSUs, Fresno and Pomona.

Briefly, AeL is an institutional program designed to engage and support faculty in redesigning large courses or gatekeeper courses focusing on student-centered learning, deeper learning, leading edge technology, and high impact pedagogies that engage students. Using proven National Center for Academic Transformation (NCAT) models and case studies, its purpose is to transform teaching philosophies and practices from traditional lecture style (sage on the stage) to student centered, active and engaged learning, to improve retention, persistence and graduation rates. NCAT principles align with the focus of this grant: 1) [redesign the whole course](#); 2) [Encourage active learning](#); 3) [Provide students with assistance](#); 4) [Build in ongoing assessment and prompt \(automated\) feedback](#); 5) [Ensure sufficient time on task and monitor student progress](#).

With 1 year of planning, 2 years actual experience and analysis, and a 3rd AeL in the planning stages, Chico proposes to partner with 3 (out of 23) sister CSU campuses to achieve **adoption at scale in the CSU system**. Both Fresno and Pomona have some similar initiatives engaging faculty in redesign efforts in similar discipline courses. We expect to leverage NCAT training and tools, share our strengths of faculty and staff to train, support and facilitate course redesigns, share processes, materials and best practices, align our measurements, and compare results so they can be shared across the CSU system.

AeL was initiated at Chico to address 4 learning challenges:

- Increasing class sizes and soliciting student engagement without increasing daily teaching and grading activities.
- Faculty lack of familiarity with new interactive technologies that present the greatest benefit and efficiency (deeper learning).
- A lack of campus-generated data on student success in large-format technologically-supported classes (blended learning).
- A lack of functioning and tested large course redesign models that demonstrated effective practices, preserved student learning, student/faculty satisfaction, and financial savings.

Responding to these challenges and those posed by diverse student populations on all 3 campuses, AeL's goals has been to **improve student learning, engagement, retention, and attainment of student learning outcomes (SLO)** through the redesign of high enrollment courses and cost saving measures (Note: Pomona is 31% Latino, 25% White, 25% Asian and 4% African-American and Fresno is 34% Latino, 34% White, 15% Asian, and 5% African-American.)

AeL has synergized a highly engaged group of faculty conversing on redesign success and failures. The process has confronted fixed attitudes and teaching philosophies that were highly resistant to change. Through organizational leadership at Chico we have achieved **adoption at scale** with integrated assessment measures and documented success in the NGLC challenge areas.

Tracking comparative DFW rates in AeL courses and traditional course formats is a metric central to our analysis for COURSE AND DEGREE COMPLETION based on the suggestion of NCAT consultants. This is one of several important measures used to assess the effectiveness of course transformation because to the extent that we can lower DFW rates we can ensure that students will graduate in a timely manner. The CSU Graduation Initiative has been adopted by all CSU campuses to meet this objective. AeL provides a systematic method to attain our benchmarks in student PERSISTENCE and graduation rates.

SLO assessment (CONTENT MASTERY) is central to AeL and involves two parts: 1) to systematically include assessment in faculty training in the course redesign process as both technology and assessment are central components of how to think about redesigns rather than "add-ons;" 2) to provide systematic assessment and comparison of SLOs in traditional vs. redesigned formats.

Course redesigns employ a variety of **interactive and innovative technology for DEEPER LEARNING and engagement**. AeL encourages faculty to rethink course delivery, introduce interactive and enabling technologies, engage students with digital materials outside of class time and provide opportunities for active learning; to work on problem-based projects that encourage group collaboration; to focus on learning productivity gains; emphasize critical thinking; and provide feedback so that students can gauge their own learning and mastery of the content material. Technologies especially suited to promote extra-classroom collaboration allow the instructor and the student to engage in blended learning activities reducing face-to-face classroom constraints in time and interactivity.

CHARACTERS WITH SPACES **4824**

**Q5. NGLC seeks proposals for solutions that have already been investigated in at least some meaningful way and shown to generate some relevant benefits. What is the current reach of the primary solution that you propose to scale? Be brief and numeric: numbers**

**of students currently served, numbers of courses, numbers of institutions/campuses, etc.**

**500 characters maximum**

Chico is the only campus in the CSU currently operating with this particular AeL/NCAT model

Faculty involved: 26 to date

(Faculty are required to participate in teams of two or more)

Students: Approximately 5200

Courses: 14 multi-section GE or introductory courses completed redesigns including: English, Philosophy, Psychology, Communication Studies, and Accounting.

All 7 colleges at Chico had at least one faculty team participate in redesigning a course through AeL.

**CHARACTERS 470**

**Q6. If your proposal is funded, by how much do you intend to increase the reach and dissemination of the solution? Again, be numeric, using the same measures as for your previous answer:**

**500 characters maximum**

Our plan includes extending the reach of AeL to CSU Fresno and Pomona.

Together, in Wave 1, the 3 CSU campuses will reach the following.

Faculty: 42

Students to be served: 10,000

Courses: 21

Colleges involved: 16-20 distinct academic colleges

**CHARACTERS 243**

**Q7. Briefly, please discuss the immediate (i.e., within the term of the NGLC Wave 1 grant) and longer-term scaling potential of your proposed solution. What is the potential upside? What are the primary obstacles to be overcome or risks to be mitigated?**

**2,000 characters maximum**

Immediate scaling for our proposal is provided by: 1) Chico's AeL framework for institutional change and 2) successful redesign work already underway at the other 2 CSU campuses (Fresno's Curricular Innovation Initiative and Pomona's Institutes for Course Development). This partnership provides a mechanism that transfers the AeL framework to all 3 campuses (instead of reinventing the solution). The benefit: consolidation, comparison and sharing of the outcomes and best practices for redesigned courses that use **blended learning**.

Our long-term scaling potential is to double to 6 AeL institutions as the 3 initial campuses could mentor 2 campuses each after Wave 1.

The upside is as successful course redesigns are launched, the synergy and understanding about the models take hold. Faculty redesigning one course, typically begin changing other

courses based on their excitement to repeat their success. The interest and arousal of excitement in redesign is accomplished through faculty learning communities (FLC) on each campus who make presentations and share their experiences in the redesigns. (NOTE: FLCs are incentivized in the CSU system.)

**The obstacles** are a lack of institutional support for this disruptive change, intellectual property and cost.

AeL has committees and teams made up of the provost, deans, chairs and staff from campus technological and learning support units that regularly meet to keeps the conversation going throughout the institution, faculty to administration and vice versa.

A secondary obstacle is intellectual property (IP). Existing campus policies allow faculty to keep their IP for design work; however, campus rights are protected for work done within the AeL framework.

Costs are also a challenge, especially in this budget environment, to provide effective training and faculty buy-in. Time and financial resources are needed to assist faculty in redesigning courses for high levels of institutional success.

**CHARACTERS 1960**

**Q8. Which of the following descriptions best fits your proposal?**

Our proposal targets primarily young adult learners under the age of 26 (i.e., such learners will be a majority of the population served).

**Q9. Please check 'Yes' if your proposed solution will target high-enrollment, low-success developmental and/or general education courses—core, so-called "gatekeeper" courses—or similar courses in high-demand occupational programs such as business, criminal justice, information technology, and/or nursing and allied health.**

Yes

**Q10. If you checked 'Yes' in the last question, list the course(s) you will target.**

**300 characters maximum**

A variety of large enrollment/multi-section GE courses, Upper Division, and majors courses based on university, dean or department interest in order to meet student demands, especially for “gatekeeper” courses that impede graduation rate.

**CHARACTERS 238**

**Q11. Briefly discuss the OUTCOMES you anticipate achieving by the end of the grant, and how they ALIGN with the NGLC outcomes of interest: **scaling outcomes;****

**student outcomes (completion, persistence, content mastery, mastery of learning outcomes); and cost-effectiveness outcomes. If your project receives NGLC funding, what would be the maximum (realistic, not theoretical) level of success you would expect to accomplish with NGLC funds? What would be your minimum expectations for success? What would be your most likely level of success? Please bear in mind that, if your application is selected, your answers here may be used to inform your project's eventual evaluation.**  
**2,000 characters maximum**

Max. expectation: Notable improvement in student COMPLETION rates in 50% or more of the course redesigns. Min. expectation: Notable change in student completion rates in a few of the redesigns. Realistic expectation: Improvement in completion rates in 1/3 of the redesigns for the 3 campuses involved.

We have no PERSISTENCE data at this time. We will track student persistence toward graduation for all 3 CSUs.

Chico will compare student learning outcomes for CONTENT MASTERY with previous AeL cohorts. We will compare SLO performance with our sister campuses. Max. expectation: student performance improvement in 60-70% of the redesigned courses in the next Chico cohort. Min. expectation: student performance will not worsen in the redesigns at any of the 3 institutions. Realistic expectation: student performance on SLOs would improve in approximately 50% of the redesigns across the 3 institutions.

Max. expectation: Each redesigned course will improve student performance of DEEPER LEARNING OUTCOMES in 1 core area of learning (e.g. critical thinking, communication, and working collaboratively). Min. expectation: each redesign will have identified 1 deeper learning outcome with plans for implementation and assessment of that outcome. Realistic expectation: all redesigned courses will have identified 1 deeper learning outcome, with 33 – 50% being in a position to implement, measure and report results at the end of Wave 1.

Reducing the number of course sections taught in the larger courses avails another faculty to teach upper division (COST EFFECTIVENESS). Raising enrollments in course sections reduces cost of instruction per student. Decreasing the DWF rate: 1) students move to graduation faster and 2) less course sections in the future if students move through the course successfully the first time. The initial work to redesign a course takes time, but maximizes faculty efficiency in managing larger courses (e.g. online quizzes and grading).

**CHARACTERS 1973**

**Q12. Briefly discuss how your proposed plans, procedures, and activities align with the objectives and criteria detailed in the "Core Values and Criteria" and "Challenge Areas" sections of the NGLC Wave 1 RFP (i.e., both general objectives criteria and those specific to the challenge area to which you are applying). Address explicitly any objectives or**

**criteria to which you cannot or will not conform, or that you believe do not apply. 2,000 characters maximum**

In our answers to other NGLC proposal questions we have addressed these Core Values and Criteria: blended learning, deeper learning, engagement, disruptive change, demonstrated efficacy of our solution, adoption at scale, scaling capacity, intellectual property, evidence of capacity to collect data (retention, persistence, mastery of SLO, deeper learning mastery), obstacles and constraints to adoption and sustainability. Currently, we have no plans to engage with providers. The remaining values are addressed below.

Successful STRATEGY FOR ADOPTION is built on a theory of change that allows laying a foundation and then scaffolding to provide stability for transfer of the Ael model. The strategy also allows for flexibility in customizing Ael materials to fit the unique needs of each campus. To facilitate SCALING of the CONCEPTUAL MODEL, Chico plans to fully share all processes and materials with the 2 other CSUs. Our web site provides resources to mirror our process with timeline; videos; faculty recruiting, application and selection forms; summer academy curricula; assessment plans; and reporting mechanisms. Flexibility will mean that as Chico is a residence campus northern CA and Pomona is a commuter campus in southern CA, that Pomona may need to find ways to allow faculty to work together virtually while Chico faculty work face-2-face. Campuses will use web conferencing and Internet web 2.0 community tools to train, plan, and consult with one another. In the 3 week summer intensive faculty work closely with instructional designers, pedagogy coaches, librarians, faculty mentors, and assessment coordinator on their redesign. Each week faculty teams report out what they have learned and are considering for their redesign.

#### CHARACTER 2230

**Q13. In order to help us to evaluate your proposal fairly, please select the letter corresponding to the phrase below that best describes your primary proposed solution: A demonstrably effective learning solution, already widely applied and tested in the domain in which you intend to apply it, and ready for scaling to the next level.**

A learning solution showing substantial promise in the domain in which you intend to apply it, but requiring both additional evaluation and scaling.

**Q14. What evidence do you have—direct or indirect, formal or informal—that your solution has the potential to achieve the transformative outcomes sought by NGLC? What evidence, if any, is still lacking, and how would you propose to acquire it in the process of scaling your solution using NGLC funds?  
2,000 characters maximum**

Evidence from the NCAT results state that some 200 state universities and community colleges participate in NCAT's Program for Course Redesign, running workshops for professors and providing technologies that enhance student learning outside the classroom allowing teachers to

teach more students. On average, the NCAT reports that it has trimmed academic-department expenses by 37%.

### **WE HAVE THE FOLLOWING EVIDENCE FOR LOCAL REDESIGNS**

- Evidence of increased student learning on selected SLOs and comparable DWF rates
- AeL Summary Assessment Report
- Cost Efficiency - Costs of courses before and after redesign
- Interviews and reporting out of faculty as they design and implement their redesigns
- Faculty year-end written reports

### **WHAT EVIDENCE WE NEED**

- Specifics related to low-income
  - Chico - EOP student results in be reported in current AeL results summer 2011
  - Fresno and Pomona are in outstanding positions to assist in gathering this kind of data
- Systematic cost analysis
- Longitudinal data - Student persistence and improvement for time to graduation

In the last 2 years Chico has had the CAPACITY TO COLLECT AND ANALYZE AeL program effectiveness. Given the current economic crises in CA, doing this for 2 more campuses (and maybe more in the future) will put a strain on current resources. **Using NGLC funds**, we would assign a dedicated assessment coordinator who has time to gather, organize, summarize, further develop reporting mechanisms, publish and disseminate the evidence.

CHARACTERS 1493

**Q15. As noted in the NGLC Wave 1 RFP, a primary objective of this wave of funding is the elimination of redundancy and unnecessary reinvention through the wide-scale adoption of proven solutions. Briefly, discuss how your proposed solution and scaling plan will leverage existing resources—created by you and/or others—to avoid duplicating previous efforts and to break the grip of "not invented here." What interoperability standards or protocols will you observe, if any? How will you overcome formal and informal resistance to "outside" innovation in your target institution(s)? How will you make it easier for others to adopt, in turn, the solution(s) that you deliver?  
2,000 characters maximum**

NCAT provides proven redesign models used successfully across 200 institutions. Their web site provides many resources including more than 100 large-scale redesigns sorted by discipline, model and degree of success. Chico's AeL heavily leverages much of this existing material. We require faculty to review these NCAT materials before they apply to AeL. Our application forces them to answer questions and initially decide on an NCAT model they might use to redesign their course. NCAT also has tools available for institutions to download and complete to evaluate their redesigns. This allows for comparisons with other institutions.

Across higher education, course redesigns have occurred at the individual faculty level only. When attending the NCAT Conference in 2010, attendees were commenting on how Chico's AeL model with faculty teams and yearly cohorts, learning and consulting together with a broader campus community, was something they felt would provide better SUSTAINABILITY for the faculty, the course and the institution. We expect to continue building momentum to a tipping point of more courses having been designed than not. We have built institutional synergy on course redesigns, with increased curiosity and attention as we expand and distribute results.

Chico is now in its third year of implementing AeL university-wide, Provost-supported, campus initiative. The continued fiscal crisis has served as a motivation for rethinking how higher education can serve the public without compromising quality. The crisis is faced by all CSU campuses and we believe that sharing our campus AeL strategy, lessons learned and redesign results will embolden and kickstart such initiatives on sister CSU campuses where we do have established relationships and system-wide initiatives that drive us together to a common goal.

#### **CHARACTERS 1849**

URLs FOR OUR [bit.ly](http://bit.ly) web page that we can include for references

<http://www.csuchico.edu/academy/>

<http://chronicle.com/article/Bigger-Classes-Encourage/64525/>

<http://thencat.org/whatwedo.html>