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ATRE Shared Programs

And the Serving of Students in Rural Districts

A Model Program and Policy Recommendations
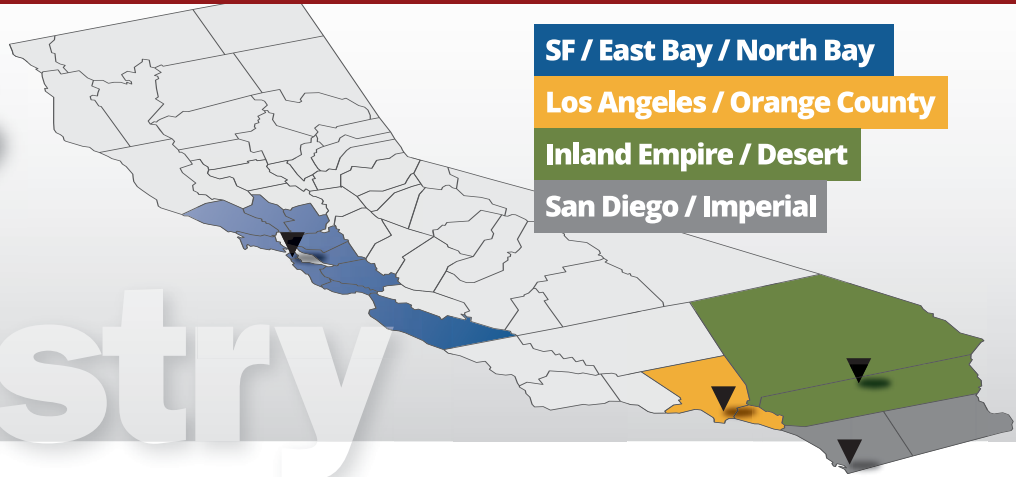
By Larry McLaughlin and Joe Wachsmuth

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Shared Programs
And the Serving of Students in Rural Areas

A Model Program and Policy Recommendations

Larry McLaughlin and
Joe Wachsmuth

The Inland Empire/Desert community college region has two distinct areas with respect to geography and distribution of students. The Inland Empire consists of densely populated urban and suburban areas in Riverside and San Bernardino Counties, lying south and west of the San Bernardino Mountains. The high and low deserts, lying north and east of the mountains, are sparsely populated and cover most of the land area within the two-county region. A challenge for the community colleges located in the desert portion of this region is the completion of full degree and certificate programs by students that are often located significant distances from the host college. Filling classes and offering courses with enough frequency to allow completion within a reasonable timeframe have proven difficult where students must travel long distances to attend. Aggregating need for workforce training programs among geographically scattered businesses can also be difficult. Unless a business is located in or near the same college community, workers may have to travel considerable distances to attend class. Yet the renewable energy industry is a rapidly growing sector in this region, with large-scale development of wind, solar, and geothermal energy taking place in desert locations. For desert communities to receive the economic benefits of this growth, community colleges within the region must work together to aggregate need and train workers in regionally shared, sector-driven programs.

A Model Approach

Serving a dispersed student population is a challenge in the desert region of Southern California. It is a challenge in any rural area of the state. Obtaining enrollment levels necessary to cycle courses with enough frequency to ensure student progress can be much more difficult than in higher populated areas with larger student enrollments. This can limit the variety and specialization of programs available to rural students. Colleges in the desert region

have responded to this challenge by utilizing distance learning technologies to alleviate the requirement of attending class on campus for many of their students. A significant portion of the FTES currently generated by desert region schools is through distance learning and/or correspondence courses.

To address this problem, an economical model that combines distance learning delivery with the sharing of courses between colleges is needed. One such model is being created for the renewable energy industry sector in the desert region in response to recent input from a regional advisory committee. Led by the Deputy Sector Navigator for Advanced Transportation & Renewable Energy, a team of educators with experience developing programs and curriculum for the renewable energy industry is working to combine coursework from three community colleges to establish a regionally-shared certificate. The working title for this certificate is: *Power Generation Foundational Skills Program*. This program brings together credit courses that are currently available and, together, address a skill set that has been identified by industry partners for entry-level operations and maintenance workers in geothermal, solar thermal, and conventional power generation facilities. The first course sequence is substantially available online and will be from Barstow Community College. It focuses on basic industrial maintenance & operations and, although developed for online delivery, several lab units will be scheduled and conducted on-campus. The second course sequence in this program comes from Imperial Valley College and focuses on utility fundamentals such as power generation and transmission. These courses will receive local review this fall for conversion to online offerings. A third course will come from College of the Desert and focuses on the specific renewable technology for which the student is training, i.e., geothermal or solar thermal. This course is not yet developed but will be so as a credit offering and available online or by video streaming.

Potential Obstacles

Although this particular combination of courses meets the knowledge and skill requirements defined by the industry, obstacles to a timely implementation exist. Lengthy program and course approval processes (taking more than a year in some cases)

and a reluctance to accept coursework originating from other colleges, impedes the creation of new for-credit offerings in response to emerging industries. To better understand these potential obstacles and recommend appropriate solutions, a series of interviews were conducted with key administrators and curriculum leaders at four desert region community colleges. Two Deans and two Curriculum Committee Chairs participated. These interviews focused on documenting each college's course and program approval process, determining what is considered critical in each process, and how the process might vary when asked to adopt courses conducted by another college via distance learning. This study also included a separate series of interviews focusing on each college's use of distance learning. These interviews gathered information on what platforms are being used, the level of support each platform requires, and how distance learning fits within the culture of the institution.

To summarize interview results, the obstacles to shared courses and programs via distance learning seem not to exist with the technology, or even in the perception of course quality, but with the local course and program approval process. None of the administrators or curriculum leaders interviewed have had course proposals come before them as originating from another college along with the request they be offered for credit by the host college. Although there was lack of precedent for such a request, everyone that participated in the interviews underscored potential problems with local approval. The following points describe a process common to all four institutions represented in the interviews (see interview summaries attached):

- Although there are slight differences between colleges, all perform a thorough course proposal and review process by a faculty curriculum committee.
- All use CurricuNet to prepare the course proposals, including SLO's and outline of record, and to facilitate the local review process.
- Faculty members must develop the course proposals, obtain approval by fellow department faculty, and shepherd the course or program through the approval process. The division Dean also plays an early approval and/or advisory role in the course approval process.

- Various other committees, individuals, and steps are also involved in the review process. The process may vary according to the locally established protocol or with the nature of the proposed course.
- Full program or certificate approvals include region and state-level reviews. Data and industry input demonstrating a level of need sufficient to sustain the full program is required.
- A curriculum handbook was cited by two interviewees and indicated that much of the process is prescribed in state education code.

When Courses Originate from Other Colleges . . .

Interview participants were uncertain as to how the process would work with courses that originate from other colleges – those interviewed had never dealt with such a request. However, there was agreement that a course originating from another college would have to receive local approval and go through the established process on campus, even if delivered as distance learning. Two of the participants felt that a more streamlined process could be established for shared courses but there would have to be evidence that the originator has done due-diligence.

. . . Who Gets Credit?

The question of which campus would receive the FTE was raised by all interview participants. This was considered an important issue. One of the participants stated that this has never been done before on their campus but indicated that such a proposal could be stopped by the Faculty Union or Academic Senate, and was fairly certain that any FTE generated would have to remain with the host institution. Perspectives mentioned include "it could be viewed as taking FTE," "may be perceived as reducing the role of faculty," and "all the participating colleges should get a "tally mark" for completers.

Solutions Emerge

Even among the concerns expressed about faculty perceptions and indications they may resist approving shared courses, possible solutions emerged. The suggestion that 'a streamlined approval process might be applied if the originating college could prove that

due-diligence was exercised when the course or program received its original review' points to a solution. Comments about 'maintaining respect for the role of faculty in shaping curricula' points to a solution. The idea of 'giving each participating college credit or "tally marks" for completers in a shared course or program' points to a solution.

Although the Power Generation Foundational Skills Program may begin with its first cohort this fall, it will likely proceed by registering students at each college as they progress through the program. In the meantime, policies should be worked out to facilitate the sharing of courses between participating colleges, including sharing of FTES and credit for program completers. The following are five enabling policy and program recommendations resulting from this study:

Recommendations

1. On a regional basis, formulate and adopt a policy acknowledging the due-diligence that each college performs during the original course/program approval process when one college is presented with a request to offer a shared course or certificate from another college. Original documentation could be required from the originating college to support the supposition. This policy, which should be written for adoption by each college's academic senate, the executive cabinet, and Board of Trustees, is intended to honor the review and approval process of the other institution. Rather than requiring a full second review by the host college before it is listed, a subcommittee consisting of two representatives from the curriculum committees of each participating school should be established to make the final determination. Such a policy maintains respect for the faculty approval process on matters related to curriculum within and across institutions, yet avoids repeating a time consuming process. A region-level endorsement may also be needed for regionally shared certificates.

2. The Chancellors Office should adopt a policy also recognizing the original course or program review process and approve the offering of such courses - originating from one institution but offered by others - based on their original approval and without further review.

3. Recognizing the economies gained through shared courses and programs, the Chancellor's Office should count FTES and completions on the ledgers of all colleges participating in the shared program. Such a policy would enable students to enroll in any of the participating colleges and remove the concern for who receives the credits.

4. Distance learning technologies should be utilized for the delivery of lecture-based classes in a shared program model, especially in rural areas of the state. Lab units may be earned through a combination of online simulation and on-site instruction. The college originating the course should be responsible for the lab-related on-site instruction, and the lab should be scheduled to minimize student travel.

5. Asynchronous, online instruction should be utilized if developed and proven effective. However, video streaming supported by webinar-style media presentations and two-way audio conferencing allows for economical course delivery to multiple locations (including job-site locations).

The Power Generation Foundational Skills Program will serve as a model and pilot for testing these recommendations in the Inland Empire/Desert Region. The region's DSN for Advanced Transportation and Renewable Energy will work with its Deans and faculty to develop the policies and implement this new shared program during the coming year.

Course/Program Approval Interviews – Summary

Participants: The following people were contacted about the Course and Program Approval Process at their college.

Barstow Community College	Kyri Freeman, Librarian and Co-Chair of Curriculum Committee	760-252-2411 X 7220	kfreeman@barstow.edu
Cerro Coso Community College	Valerie Karnes, Dean of Career & technical Education	760-384-6258	vkarnes@cerrocoso.edu
College of the Desert	Douglas Redman, Assoc. Professor & President of Faculty Senate	760-776-7390	dredman@collegeofthedesert.edu
Imperial Valley College	Efrain Silva, Dean of Economic and Workforce Development	760-355-6249	Efrain.silva@imperial.edu

Course Approval Process: Each college has a slightly different process for reviewing new courses, but all revolve around a thorough course proposal and review process by the faculty curriculum committee. Other local committees and individuals are involved in the review process. All use CurricuNet to prepare the course proposals, including SLO's and outline of record, and to facilitate the local review process.

The follow is a list of the various committees, individuals, and steps employed by the participating colleges in the local review process. Not all committees, individuals, or steps listed are employed by every college; the process may vary according to the locally established protocol or with the nature of the proposed course.

- Faculty member develops course proposal using CurricuNet
- Department faculty signs-off
- Faculty curriculum committee reviews in first read and provides recommendations
- SLO Coordinator reviews and signs-off
- Articulation Officer reviews and signs-off if intended for transfer
- Distance Learning Coordinator reviews and signs-off if intended for distance learning
- Tech Review sub-committee reviews and signs-off
- Faculty curriculum committee reviews for second time and final approval or, in some cases, is forwarded to the college Academic Senate for review

- College Council or Cabinet reviews and signs-off
- College Board of Trustees reviews and approves
- Instructional Office Coordinator or curriculum specialist inputs the course information for state-level approval

Two of the college representatives interviewed mentioned that the division Dean also played an early approval and/or advisory role in the course approval process. The faculty sponsor must describe how the course fits contextually within the full program. One of the colleges represented no longer approves stand-alone courses; the course has to be proposed as part of an existing program or new program.

Program Approval Process: The steps involved in getting a full certificate or degree program approved usually includes some number of the steps above, depending on the college, but all include region-level reviews and approvals. In addition, participants interviewed uniformly indicated that data and industry input describing a level of need sufficient to sustain the full program is required. The additional steps for program improvement usually include:

- Demonstrated need using Labor Market Data and/or industry advisory input
- Two region-level reviews and approvals
- State-level review and approval
- A more simplified review and approval process may be performed if only a program change is proposed and deemed non-substantial

Approval When Course Originates From Another College: Interview participants were uncertain of how the process would occur due to a lack of precedence. However, there was agreement that a course originating from another campus would have to receive local approval and go through the established process on campus. Two of the participants felt that a more streamlined process could be established for "shared courses" but there would have to be evidence that the originator has done due-diligence.

One of the participants pointed out that the course would have to have its own course number on the host campus.

The question of which campus would receive the FTE was raised by all interview participants. This was considered an important issue. One of the participants indicated that this has never been done before on their campus. He/she indicated that such a proposal could be stopped by the Faculty Union or Academic Senate and was fairly certain the FTE would have to remain with the host college. Perspectives mentioned include "it could be viewed as taking FTE," "may be perceived as reducing the role of faculty," and "all the participating colleges should get a "tally mark" for completers.

In addition to the traditional approach to new course approval, one of the interview participants talked about allowances for students to petition the program advisor to count credit earned in a similar course or program at another college. Another talked about the possibilities of awarding credit under a contract course arrangement with the employer.

Distance learning Course Approval: There was agreement on the point that distance learning courses, whether originating from another college or from within the campus itself, must go through the established course review and approval process. All indicated that distance learning course proposals had to address additional issues such as instructor training, user interface, and impact on support personnel. Each campus requires a separate form to convey this information.

One of the college representatives interviewed stated that, as a faculty member one cannot create an online course unless he or she is "certified" for online courses. This involves completing training conducted by the college on online learning. The faculty member must be approved by the Distance learning Committee. This committee also reviews the technical and methodological aspects of the course proposals.

There was also recognition given to the potential limits of distance learning in Career and Technical Education courses. Course proposals that describe "virtual labs" as part of the delivered instruction would be given more scrutiny and verification may be needed that such labs can substitute for live training. It was observed by one participant that labs still may need to be conducted at the originating campus.

Opportunities: Courses originating from more than one college may be combined into sequences and future certificates if they are submitted for review and approval by the host college. However, this will require careful preparation and a faculty champion at each host college. Distance learning is not a specific factor if labs are handled effectively. If the necessary level of cooperation is achieved, students distributed throughout the desert region may have more options to complete full industry-relevant certificate programs, meeting industry workforce needs.

Roadblocks: Perceptions that FTE will be taken by another institution. Concern that quality standards will not be at level expected by the host institution. Time required to have courses reviewed and approved. Lack of model program to guide discussion.

Distance Learning Survey – Summary

Participants: The following people were contacted and interviewed about Distance Learning (DL) at their college. This summarizes the information provided about their programs and requirements.

Barstow Community College	Sandi Thomas - Dean, Career & Technical Education	760-252-2411	sthomas@barstow.edu
Cerro Coso Community College	Valerie Karnes - Dean, Career Tech. Ed.	760-384-6258	vkarnes@cerrocoso.edu
College of the Desert	Felix Marhueda-Donate Assist Prof. Math	760-773-2523	fmarhuenda@collegeofthedesert.edu
Imperial Valley College	Efrain Silva - Dean Economic & Workforce Development	760-355-6249	efrain.silva@imperial.edu

Platforms Used: Blackboard is a widely used commercial product. Moodle is an open source free product. Both require some support from the college for hosting and development. Both are well used and considered the better products on the market.

College of the Desert   Blackboard
Cerro Coso Community College   Moodle 2.5
Barstow Community College   Moodle
Imperial Valley College   Blackboard

Courses Offered: Almost every discipline has some distance learning (DL) course offered. Barstow has about half of their courses offered thru DL. The volume of course depends on the instructor offering the course and the level of support from the institution. The more 'tech savvy' they are, the more courses they have developed. The following are links to see each college's current offerings:

Cerro Coso Community College - http://www.cerrocoso.edu/cconline
Cerro Coso CC has conducted DL for the last 10 years. They are way ahead of the curve.

Barstow Community College - http://www.bcconline.com/classes2.htm
Barstow CC wants to move their Industrial Training to DL.

Imperial Valley College - http://www.imperial.edu/courses-and-programs/distance-education/online-orientation-times/

College of the Desert - http://www.collegeofthedesert.edu/students/cs/Spring%20Schedule/Spring%2014%20Printed%20Schedule.pdf (This is a large catalogue with some DL classes offered. Look for the 'computer icon' by the course number denoting an online class.)

Requirements:

Staff: Professional staff involved with distance learning is trained in the DL platform at each institution. It is a requirement of employment. They are encouraged to use DL to enhance the learning environment.

Students: Students are registered to the college and thereby have access to the DL tools for that school. There are online training sessions for the student to become acquainted with the platform.   All students are trained to some degree so they are ready for some DL component in their coursework. Students will benefit from having their own computer and internet access. Students generally have access to the computer facilities at the college, or other public places, but have to travel there.

Hardware: Any recent computer, operating system, updated browser and internet connection is sufficient.

Support:

Staff: The colleges usually have a person on staff designated to facilitating the DL program. They can help the instructor with any issues they may have.

Students: The college, or the hosting entity, will have someone on staff to sort out password or connection problems for the student.

Development: The colleges that use DL heavily have in-house development help from their IT departments. COD has a 'green screen' room for staff to videotape their sessions for use in DL. There are commercial firms that will offer these services as well, like 3C Media Solutions - http://www.3cmediasolutions.org/ . 3C Media Solutions is an educational media distribution source for video content, podcasts, streaming services, and event coverage for the California Community Colleges System.

Trends / Road Blocks:

A - More DL courses are being developed all the time throughout the community college network.

B – Barstow Community College wants to offer their entire NCCER Industrial Training course catalog as DL and they are working toward this goal. The challenges are the 'performance tests' that need to be done in person.

C – Schools are trying to make all the courses needed for a degree possible with DL. As they work toward this goal, they have a mix of online and in person courses. DL students may be required to take some courses on campus.

D – Traditional instructors may have some resistance to this style of teaching. The mandatory staff training at the college is important for their success.

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Campuses

Need Help Starting or Developing a Class or Program?

Attention: Faculty, Dean, College President

1 **Is your college already in one of these regions?**

- San Francisco Bay Area
- Inland Empire, Desert Region
- LA/Orange County Region
- San Diego/Imperial Region

2 **If so, contact the DSN in your region directly.**
To find out what programs they have to offer.

3 **If you are NOT in one of these regions**, download an **EOT** (Educational Opportunity Template) from the ATRE website — www.atreeducation.org. (This document is available on the homepage and throughout the site.)

4 **Start preparing for this new opportunity. We'll help you create a pathway to work with industry through your region.** By completing the **EOT** checklist template, you will identify your champions, identify your funding, get stakeholder buy in, and be fully prepared to take this forward to your Regional Chair for consideration.

5 **Finally, contact Peter Davis, Statewide Sector Navigator for more information.** If you see a connection with your ATRE goals and manufacturing, agriculture, water, international trade, health, small business, biotech, or information technology — we can also help. I'll help you open a dialog with your Regional Chair, deans or industry agencies to complete the circuit!

Visit the website at: **www.atreeducation.org**

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