STRENGTHENING PRE-COLLEGIATE EDUCATION IN COMMUNITY COLLEGES

Sponsored by The William and Flora Hewlett Foundation
And
The Carnegie Foundation for the Advancement of Teaching

Proposals must be received at the Carnegie Foundation by November 1, 2004

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This proposal seeks to build on the innovations Los Medanos College has successfully implemented over the last five years in developmental education. We have shifted our focus from the under-prepared student to a focus on a prepared institution. We have received significant institutional resources to continue the implementation of a programmatic approach to development education characterized by an outcomes-based curriculum. Based on the belief that professional development and faculty collaboration are key to sustaining these changes, we have invested in Teaching Communities as our primary vehicle for the improvement of teaching and learning. We seek your support in expanding these teaching communities, and capturing the many facets of our work on a multi-media website that will put what we have learned, and are continuing to learn, just a click away not only for our faculty, but for faculty anywhere in the world.
A. CAMPUS DEMOGRAPHIC DESCRIPTION
Los Medanos College (LMC), located in the small industrial city of Pittsburg, serves residents of East Contra Costa County, which in recent years has experienced an enormous influx of suburbanization and a rapid growth of over 100,000 residents in the past decade. Yet, while the service area is growing exponentially, the gap between the economically well-off and the poor has widened. The average household income of LMC students is less than half of the East Contra Costa median annual household income, which is already $14,400 less than that found in Contra Costa County. More than half of the LMC students are ethnic minorities, while only 16% of adults over the age of 25 have a college degree, as compared to 48% in other regions of the county. As the only institution of higher learning in East County, student enrollments have increased by 30.6% in the last six years, and this demand is expected to continue.

A Fall 2003 snapshot of the LMC student population shows the following characteristics:
• A total enrollment of 8,189 students
• Ethnic diversity: 43% Cauc; 23% Latino; 12% Afr-Am; 7% Filipino; 6% Asian; 9% oth/unkn
• 48% are between the ages of 18 – 34 years of age
• 22% are full-time students and 78% are part-time
• 41% receive financial need-based aid
• 80% are first generation college students
• 81% assessed below college level English and 84% assessed below college level math

B. CURRENT PROGRAM DESCRIPTIONS
Overview of Developmental Education Courses at LMC

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<td>1888</td>
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Special features or pedagogical innovations
The primary approach we have taken to sustaining the developmental education initiatives, begun in 1999 with Title III funding, is the establishment of course-specific Teaching Communities. For the last two years, course-specific Teaching Communities, comprised of faculty teaching the same developmental math or English course, have met throughout the semester to closely examine student learning in the designated course. Because we have already done the work of articulating course and program level outcomes for developmental math and English, our teaching communities focus on how to provide students with the learning experiences they need to achieve these outcomes. In addition, we agree at the beginning of the semester on which outcome or outcomes to study, how student achievement of the outcome will be assessed across sections, and a rubric for holistic assessment of student work. Then, throughout the semester we share instructional activities and sample student work in order to examine what is helping students’ learn, and what they are still struggling with and why. Our teaching communities are based on:
• Collaborative investigations into student learning
• Content-based staff development
• An assessment cycle based on student learning outcomes
• Integration of research and best practice into curriculum and pedagogy
• Integration of Reading and Writing into English courses

Rationale (Theory of Change)
At the beginning of our Title III grant, we devoted a great deal of time to reading the research on student learning, particularly in regard to reading and composition. We had a weekly “seminar
series” in which we discussed articles appearing in the professional literature. From that beginning, we developed “teams” that worked on major curriculum reorganization, including the complete restructuring of our previously separate reading and composition courses into integrated reading and writing courses at three levels. In math, the approach of “curriculum based professional development” was adopted after reading an influential study (American Educator, Summer 2002) that demonstrated that this was the only kind of professional development that had demonstrable effects on improving student learning.

Thus, early on, we developed an abiding belief in the necessity of faculty coming together on a regular basis to decide how to implement research-based best practices. We came to value this dialogue and see the positive results of faculty collaboration. Today, we see ourselves as part of a larger program with a theoretical grounding and a shared sense of purpose, rather than individuals who happen to teach the same course at the same college. Our theory of change is that idiosyncratic efforts, while sometimes brilliant and inspiring, can not affect the same kind of sustainable innovation and culture of teaching and learning that a community of practice can. While we respect each other enormously as individuals, it is as a community that we build understanding and advance our own skills as teachers, and ultimately, offer our students greater opportunity to learn.

Data to assess effectiveness of strategies
We collect three kinds of data for assessing the developmental education program:

1. **Direct Measures:** Assessment of learning outcomes in DE math and English, e.g. in an analysis of 136 final exams from seven different sections of Elementary Algebra, 69% of the students performed procedural skills perfectly or with minor errors.

2. **Indirect Measures:** Monitoring of student retention, success, persistence and performance in progressively higher level course sequences leading to transfer level courses, e.g. Eng. 70, one of our new pre-collegiate integrated reading and writing courses, had success rates go from 49% in the baseline year of 1998 to 63% in Fall 2000, 61% in Fall, 2001 and 60% in Fall 2002. Prior to instituting the new curriculum, stand alone courses in reading and composition had average success rates of 56%.

3. **Qualitative Measures:** Collecting student and faculty feedback regarding experiences with various aspects of the developmental education program through surveys, focus groups, and interviews, e.g. 91% of faculty participating in an Elementary Algebra Teaching Community in Fall 2003 rated assessment activities as very important to the developmental education program.

Please refer to Appendix C of our developmental education program report, “Building a Prepared Institution” for data that addresses the effectiveness of our teaching communities, thus far.

C. PROPOSED PLAN OF ACTION
LMC has provided substantial funding to institutionalize leadership positions in the Developmental Education Program and short-term funding for professional development, curriculum, and assessment branches of the program. However, substantive institutional change will only occur if we are able to “capture” the fundamental principles upon which the program rests for future faculty and students who were not part of this initial effort. In addition, sustained improvement in student learning will require us to build upon and enhance professional development activities that have shown promise of effectiveness. The financial, technical and intellectual support provided by the Carnegie Foundation would assist us in orienting and
supporting new faculty as well as stimulating and documenting the Scholarship of Teaching that is occurring within our Teaching Communities. It would also provide valuable information to other colleges working to design a program in developmental education or to improve pre-collegiate instruction. Toward that end, LMC is proposing two major goals for this partnership:

**GOAL 1:** Create a multi-media website for the purpose of orienting new faculty to the LMC Developmental Education program and providing information for other colleges designing Developmental Education programs.

**GOAL 2:** Expand and enhance the professional development and assessment efforts provided by Teaching Communities. Produce a staff development “curriculum” handbook and course-level assessment “guide”.

Leadership for the project partnership will be shared by Developmental Education Math Coordinator, Myra Snell, and Developmental Education English Coordinator, Nancy Ybarra.

**Goal 1: Create a multi-media website for the purpose of orienting new faculty to the LMC Developmental Education program and providing information for other colleges designing Developmental Education programs.**

**Need / Rationale**
The reality at LMC, like so many other community colleges, is that adjunct faculty teaches most of our developmental courses. Due to high adjunct turnover, we must ensure that new instructors are oriented to our program goals, values and mission and understand the principles central to student learning and success in pre-collegiate courses. Furthermore, most instructors need curriculum-based training in how to effectively teach and assess student learning so that students attain desired outcomes. In addition, we want to create a way to capture the curricular and pedagogical innovations that our adjunct faculty contribute to pre-collegiate instruction. Because most adjunct faculty cannot attend regular meetings (even if there were enough time and resources to provide that training), our idea is to create an interactive on-line training network that will be of use to developmental educators at our college and elsewhere.

**DESCRIPTION OF CONTENT FOR MULTI-MEDIA WEBSITE**
A professional Website / Multi-media consultant will be hired to work with the Carnegie Foundation’s Knowledge Media Lab to design a website, that will have multi-media materials and links to information in the following areas:

a. **Program goals and structure:** This part of the website will provide an orientation to the LMC Developmental Education Program and materials to help others in pre-collegiate program development. Materials will include descriptive information about the LMC Developmental Education Program, research in the field of developmental education that informed the structure of our program, and “how to” activities on the use of benchmarking and other strategies to focus the direction of program design.

b. **Support for faculty teaching in a Developmental Education Program:** This part of the website will stimulate and document the Scholarship of Teaching in pre-collegiate developmental instruction through course-specific “virtual” teaching communities, where desired learning outcomes and assessment results will motivate curricular and pedagogical investigations. Other support materials will include “how to” materials on best practices in instructional design, videos demonstrating the use of active learning strategies, course-specific curricular materials based on the Reading Apprenticeship
initiative, and strategies for integrating student self-assessment and reflection into pre-collegiate curriculum.

c. **Assessment of Learning Outcomes:** Here the focus will be on using assessment to improve teaching and learning. The website will feature case studies demonstrating the use of classroom assessment and a guide to course and program-level assessment of student learning based on best practice and our experience. Other support materials will include “how to” activities for professional development in initiating and bringing closure to writing program and course learning outcomes, in designing and conducting assessment, and in initiating and monitoring the use of assessment results to improve teaching and learning.

d. **Program Evaluation:** Here the focus is on maintaining a successful program through the use of direct, indirect, and qualitative data. Resources will include LMC assessment results and suggestions for choosing and using different assessment methodologies with discussion of common pitfalls; LMC’s research agenda and institutional effectiveness data with tips on designing a research agenda, interfacing with the Office of Institutional Research, using data to make decisions and avoiding common pitfalls; and survey results of faculty and student perceptions of the impact of Developmental Education interventions on learning with suggestions on gathering qualitative data and avoiding common problems in survey design.

**ACTIVITIES / TIME LINE**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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</table>
| 1. Hire a consultant to design and create an interactive multimedia website with the help of the Carnegie Foundation’s Knowledge Media Lab.  
2. Write content/script to incorporate into website.  
3. Video interviews with faculty and students in DE program emphasizing programmatic, outcomes-based approach to DE. Incorporate interviews into website.  
4. Create a beta-version of website. (further development in yrs 2 & 3) | 1. Incorporate video of teachers in DE English and math courses demonstrating “principles in action”, eg. active learning, collaborative learning, self-assessment, reading apprenticeship, problem-solving in real life applications, etc.  
2. Begin planning for setting up “virtual teaching communities” on line in year | 1. Go on-line with virtual teaching communities. |

**GOAL 2: Expand and enhance the professional development and assessment efforts provided by Teaching Communities. Produce a staff development “curriculum” handbook and course-level assessment “guide”**.

**Need / Rationale**

LMC has provided short-term funding for the continuation of Teaching Communities in developmental math and English. Teaching Communities help to establish equitable experiences and standards for students, to ensure program quality, and to improve learning. The collaboration of faculty in a course-specific Teaching Community ensures that students are aware of expected outcomes, have similar learning experiences, and are judged by similar
standards, regardless of who their instructor happens to be. In large departments like Math and English where adjuncts teach a majority of the developmental classes, the level of professional development provided through a Teaching Community ensures program consistency and helps to maintain program quality. Finally, research referenced in the SU 2002 issue of American Educator suggests that staff development efforts grounded in an instructor’s course content leads to improved student learning. Teaching Communities are based on this model. This grant would provide an opportunity for us to enhance and document the Scholarship of Teaching as it takes place in these Teaching Communities.

DESCRIPTION OF TEACHING COMMUNITY ACTIVITIES

a. **Design instruction and assessment aligned with student learning outcomes in developmental math and English courses:** Faculty develop clearly articulated learning outcomes that include general college skills and literacies, assessment tools aligned with learning outcomes, and classroom activities that provide context and scaffolding for a deeper understanding of concepts. These materials will be posted on the website in an interactive format that allows for feedback and changes.

b. **Support faculty development in improving student learning in developmental math and English courses:** Faculty meet frequently to produce the outcomes-based instructional materials described above, to analyze student work with the goal of improving curricular materials and pedagogy, and to discuss ways to improve teaching and learning. From these meetings, we will write a staff development “curriculum” to guide others in running Teaching Communities.

c. **Conduct course-level assessment with holistic evaluation:** Faculty will conduct a criteria-based scoring of student work across sections of the same course to determine how well students learned the course outcomes. An analysis of assessment results will form the basis of future investigations into teaching and learning, which will take place in part in the “virtual” Teaching Community environment. From this work we will also generate a course assessment “guide” to assist others in conducting assessment of student learning across sections of the same course.

**ACTIVITIES/TIMELINE:** Each year we will sponsor Teaching Communities in one developmental math course and one developmental English course, generate the electronic “notebook” for each of these courses (to include curricular unit plans aligning with Developmental Education program learning outcomes, a set of assessment tools and a rubric, classroom activities, and instructions for conducting course level assessments). All results and recommendations will be posted in the “virtual” Teaching Community of the Goal 1 website.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<tbody>
<tr>
<td>1. Establish a format for class activities and assessment reports</td>
<td>1. Write staff development curriculum guide</td>
<td>1. Write assessment guide and go virtual with all Teaching Community materials</td>
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<tr>
<td>2. Produce E-notebook for two DE courses</td>
<td>2. Produce E-notebook for two different DE courses</td>
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**D. EVALUATION**

In addition to our on-going evaluation of the developmental education program, which includes direct, indirect and qualitative measures, we will specifically measure the effectiveness of our website and teaching communities as follows:

1. **Multi-media Website**
Year 1: Design an evaluation survey that asks full and part-time faculty in English and math to review the website and assess for:
  • Clarity, accuracy and completeness of information provided
  • Ease of use
  • Value of information provided for classroom instruction

Year 2: Have full and part-time faculty in English and math at our own college, and other colleges participating in this Carnegie/Hewlett initiative, view the videos of teaching and assess:
  • The degree to which the video exemplifies principles of effective teaching
  • Ways in which they could apply those principles to their own teaching

Year 3: Design measures for evaluating virtual teaching communities and apply those measures to the first virtual teaching communities for the purposes of formative evaluation. Also, ask other colleges participating in the Carnegie/Hewlett initiative to “lurk” in those virtual teaching communities and assess their applicability to their own colleges.

2. Teaching Communities

Year 1: Evaluate and improve E-notebooks developed for Developmental Education courses by asking new part time faculty to use them in planning to teach that course for the next semester, and provide feedback on:
  • Clarity and completeness
  • Ease of Use
  • Value for classroom instruction

Year 2: Evaluate and improve staff development curriculum guide by having Developmental Education leads use it to plan Teaching Communities in subsequent semesters. Then, DE leads will be asked to provide feedback on how helpful the guide was with regard to helping them:
  • Structure the teaching community, set goals, and provide a focus for that semester’s work
  • Facilitate teaching community meetings to achieve desired objectives
  • Teach participating faculty the art of “designing backwards” from learning outcomes
  • Cope with common pitfalls and challenges, e.g. providing constructive feedback to faculty who misunderstand teaching community goals

Year 3: Evaluate and improve the assessment guide by having DE leads provide feedback on:
  • How well they were able to organize and implement the end-of-semester holistic assessment
  • What worked/what didn’t work/what’s missing

E. INSTITUTIONAL RESOURCES / REFORM ALIGNMENT
Los Medanos College has carried through on the institutional promise that it made to the Department of Education when it submitted the Title III grant. Recognizing the documented value that the Developmental Education program has brought to the entire campus, LMC has institutionalized a total of 2.5 DE FTE positions, including percentages for Leadership, Faculty Coordinators, the Reading and Writing Center Director and related staff. Because of this track
record, there is little doubt that if the initiatives in this grant are documented as proven successful that LMC will keep its promise and institutionalize them.

In addition to, and partly as a result of, the major changes that have been implemented in developmental education as a result of our Title III grant, LMC is now embarking on another major institutional reform: assessment of student learning outcomes. In a meeting with our college president in which we were discussing the impact assessment was having on our developmental education program, he said, “I don’t see any other movement on the horizon that has the potential for impacting teaching and learning that assessment has.” Given this statement, it is not surprising that assessing and improving student learning is the number one goal in our Educational Master Plan, and has garnered significant institutional resources. Modeling the assessment component implemented for developmental education, Los Medanos College has launched an ambitious Teaching and Learning Project which aims to assess student learning outcomes at the course and program level in developmental education, general education, occupational education, student services, and library and learning resources. It is not coincidental that the same individuals who are providing leadership for developmental education, Myra Snell and Nancy Ybarra, are also the faculty coordinators for this college-wide assessment effort. Clearly, our plans for enhancing the work of our teaching communities are well aligned with this institutional reform. In fact, we have begun a number of teaching communities in general education, and they are beginning their work on the assessment cycle.

Is this work likely to improve academic outcomes for low-income and minority students, especially those in pre-collegiate developmental education courses? Absolutely. By the very nature of our student population, these are the students in our developmental courses, as well as other courses on campus. The data reported in “Building a Prepared Institution” provides evidence that these students are progressing through our developmental sequences. Furthermore, by making explicit the intended outcomes of our courses, and by publishing shared expectations, students across sections know what they need to be able to do at the end of a course and program. Teaching Communities provide for more equitable and public standards.

F. Dissemination Plan
The work done at Los Medanos College in developmental education has already been widely disseminated, and we certainly plan to continue sharing with, and learning from, other colleges. Our 1998 Developmental Education Task Force Report was posted on the websites of the Academic Senate for California Community Colleges and the state Chancellor’s Office. (Nancy Ybarra served on the Basic Skills Committees of both of these organizations, and was one of the lead writers of the Academic Senate Basic Skills report of 2003.) We have made numerous presentations on developmental education, including presentations to the U.C. Berkeley Community College Consortium facilitated by Norton Grubb, and Academic Senate Sessions in both northern and southern California, and the Governing Board of the California Community Colleges. Most recently, we have been invited by the Research and Planning Group to make presentations at their Student Learning Outcomes Workshops statewide. In addition, a number of colleges have visited us to learn more about our approach to developmental education. Please see the materials we have included in our appendix that lists these activities. In addition, we have highlighted the report by College of the Redwoods to indicate where it has acknowledged our help in designing their developmental education program.

Of course, our primary dissemination plan is the multi-media website itself, which will allow faculty anywhere in the world to see how our program is organized, view video clips of our
faculty teaching, and observe virtual teaching communities in action with samples of student work at different levels, a staff development curriculum guide, and an assessment planning guide just a click away.
## PROGRAM BUDGET

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BUDGET NARRATIVE

Program Coordinators ($18,000 per year)
DE Program Coordinators Myra Snell and Nancy Ybarra will share the overall management and implementation of this program.
Major responsibilities will include:
• Oversee project activities
• Write website content and determine links
• Write staff development curriculum guides
• Write Assessment Guide
• Coach and support DE Leads
• Work closely with Website / Multi-media consultant
• LMC liaison with Carnegie and William and Flora Hewlett Foundations

Program Coordinator stipends are based upon 180 hours each year per coordinator @ $50 per hour, to be scheduled during the fall and spring semesters, as well during the summer.

Administrative Assistant ($4,000 per year)
The Administrative Assistant will be responsible for the program’s clerical and administrative support services. The budget is based upon 5 hours per week @ $20 per hour (includes benefits) for 40 week per year.

Teaching Community Participants ($20,000 - yr 1 / $32,000 – yrs 2 & 3)
Each semester a Teaching Community (with ten faculty members each) will be formed for one DE math course and for one DE English course. Teaching Community faculty stipends are based upon 16 hours per semester @ $50 per hour for a total of 8 semesters. Teaching Communities have been awarded $12,000 of institutional funds for 2005, thereby lowering the first year’s request to the foundation.

Website / Multi-Media Consultant ($55,000 – yr 1 / $43,000 – yrs 2 & 3)
A consultant will be hired to design and develop the multi-media website. The consultant will work closely with the Program Coordinators for website content and with both LMC’s Marketing Director and Web Administrator for consistency of design and technical implementation. The budgeted contract amounts are based upon the LMC Marketing Director’s experiences and preliminary cost analysis.

Indirect ($3,000 per year)
This indirect budget line item will be used to cover expenses such as supplies, printing, telephone, travel and other related operational expenses. The amount was recommended by the campus business office, based upon expenditures of programs similar in scope and size.

SUSTAINABILITY
LMC has carried through on the institutional promise that it made to the Department of Education when it submitted the Title III grant. Recognizing the documented value that the DE program has brought to the entire campus, LMC has institutionalized a total of 2.5 DE FTE positions, including percentages for Leadership, Faculty Coordinators, the Reading and Writing Center Director and related staff. Because of this track record, there is little doubt that if the initiatives in this grant are documented as proven successful that LMC will keep its promise and institutionalize them.