

Los Medanos College

Developmental Education Program Components

I. Organizational Structure

Research/Effective Practice

Research suggests that centralized developmental education programs are more successful than decentralized programs. (Boylan, 2002; Donovan, 1974; Boylan, Bliss, & Bonham, 1997; Roueche & Baker, 1987; Roueche & Snow 1977.) Centralization is characterized by developmental courses and services that are highly coordinated, housed in a single department or program, and headed by a chair or director. The CQIN/APQC (2000) study, as summarized by Boylan (2002), found that although the overwhelming majority of exemplary developmental education programs were centralized, exemplary programs that were decentralized exhibited the same high level of integration and communication among courses and services, as well as having an administrator who was either officially or unofficially responsible for campus-wide coordination of developmental education activities. In their analysis of data from the National Study of Developmental Education, Boylan, Bliss, and Bonham (1997) found that highly coordinated decentralized programs produced outcomes comparable to centralized programs, including comparable student success rates in developmental courses.

The need for a centralized or highly coordinated organization for developmental education programs is effective practice A.3 in *Basic Skills as a Foundation for Student Success*.

LMC Current Practice (2007)

LMC has a decentralized developmental education program that is coordinated by a faculty member (or a team of faculty members) at a total of 0.50 release time. This Developmental Education (DE) Coordinator oversees the work of two faculty DE Leads, one in English and the other in math, both of whom receive 0.50 release time to coordinate professional development and assessment activities related to developmental education in their respective departments.

The DE Coordinator also facilitates the work of the Developmental Education Committee. This committee is charged with the following responsibilities:

1. Coordinate the assessment of the Institution-level Student Learning Outcomes of the Developmental Education Program including
 - a. *Direct Measures* of student learning: e.g. holistic assessment of final exams or papers in capstone developmental English and math courses (English 90 and Math 30) to ascertain student achievement of program student learning outcomes.
 - b. *Indirect Measures* of student learning: Work with the Office of Institutional Research to establish an on-going research agenda that

- provides indirect measures of student achievement of program outcomes, addresses research needs specific to program initiatives, and provides information pertinent to making decisions for program improvement.
 - c. *Qualitative Measures*: facilitate the use of surveys, focus groups, etc. to document student perception of their learning
- 2. Support proper placement of students into the developmental course sequences in English and math
 - a. Implement and support best practice in placement as supported by research in the field of Developmental Education
 - b. Coordinate cut-score validation studies to insure proper placement of students at matriculation
 - c. Instigate other research with OIR to monitor the impact of prerequisites
- 3. Support curriculum development and improvement that
 - a. is aligned with the DE Program SLOs
 - b. responds to assessment results
 - c. integrates the principles of best practice as defined by research in the field of education
- 4. Coordinate professional development opportunities, such as Teaching Communities, for DE faculty that
 - a. responds to assessment results
 - b. supports faculty in their efforts to effectively teach to the DE Program SLOs
- 5. Coordinate the integration of precollegiate instruction and academic support services in order to
 - a. Respond to assessment results
 - b. Implement best practice in the integrated use of academic support services, such as tutoring, lab services, supplemental instruction, the Reading and Writing Center, counseling services, and learning communities

Membership of the Developmental Education Committee:

Coordinator(s) of the Developmental Education Program
 Developmental Lead in English
 Developmental Lead in Math
 ESL Lead
 Reading and Writing Center Coordinator
 Tutor Coordinators from math and English
 Representative from the Counseling Department
 Senior Dean of Instruction
 Senior Dean of Student Services

The Math Department also has a Developmental Math Committee that meets weekly to coordinate assessment, professional development, support services, and curriculum development for developmental math courses.

II. Assessment and Placement

Research/Effective Practice

There is clearly a consensus in the field of developmental education that mandatory assessment and placement are key components of successful programs (Boylan, 2002; McCabe, 2000; Roueche & Roueche, 1999.) While a majority of community colleges require assessment for incoming students unless they meet specific criteria for exemption, mandatory placement is more likely to occur in four-year colleges and universities than in community colleges (Roueche & Roueche, 1999, p. 24). Boylan (2002) in *What Works* explores a number of reasons why mandatory placement has not been instituted in more community colleges. He concludes that the most valid argument against mandatory placement is that developmental courses are not effective. Agreeing with Norton Grubb that too many developmental courses are “dull, poorly taught, and emphasize low level drill and practice” (Boylan, 2002, p. 36), Boylan recommends that institutions evaluate their developmental courses before instituting mandatory placement to ensure that the quality of instruction is high, and that the methods and techniques used are found to be effective. In *Basic Skills as a Foundation for Student Success*, mandatory orientation, assessment, and placement is effective practice B.1 (p. 23).

LMC Current Practice (2007)

Matriculation policies and procedures are clearly stated in the LMC catalog and comply with Title 5 regulations. Students may be exempted from matriculation processes of assessment, orientation and advising if they a) already have an Associate Degree or higher or b) enroll in fewer than 6 units and state that they are not pursuing a long-term educational objective. Students are also informed of their right to waive matriculation services and this is listed as an option on the matriculation exemption request form. However, students are not required at this time to fill out the exemption/waiver form.

LMC uses Accuplacer, a computerized placement test published by the College Board and accepted by our state Chancellor’s Office. It uses an adaptive testing mode that presents different questions to different students depending on their responses to test items. This allows for quicker and more accurate testing. Background questions embedded in the test provide multiple measures that are used in determining placement advisement. The LOEP (Levels of English Proficiency) is used for placement of non-native speakers of English in English and/or ESL courses. LOEP is part of the Accuplacer package, and students can be “branched” into the LOEP test depending on their responses to background questions and test item responses.

Consequential Validity studies for the purpose of validating cut scores are conducted by the LMC Office of Institutional Research in accordance with the *Standards, Policies and Procedures for the Evaluation of Assessment Instruments Used in California Community Colleges*. The Consequential Validity study identifies students within the cut score range and compares the instructors' view of the student's level of preparedness for the course with the student's view of his or her preparedness. The study looks for a three-way match among faculty perception of the appropriateness of a student's placement, the student's perception of his or her placement, and the Accuplacer score. In order to determine that the cut scores are appropriately set, the match must occur for at least 75% of the students.

English courses two-levels or more below 1A, ESL courses, and math courses below Elementary Algebra do not have prerequisites, though assessment scores and responses to questions embedded within Accuplacer are used for advisement. Prerequisites for English 90 (one-level below 1A) and higher-level English courses are based on assessment score, which includes points from the multiple measures questions, or previous LMC course work in English. The prerequisite for Elementary Algebra is similarly based on an assessment score adjusted for multiple measures or previous LMC math course work. The prerequisite for Intermediate Algebra allows students to enroll who have achieved a "C" in high school Algebra II within the last two years even if their assessment score indicates a lower placement. Because the establishment of mandatory placement in math has been so controversial at LMC, prerequisites for transfer-level math courses are not keyed to the placement test. Students can enroll in any transfer-level math course if they have earned a "C" or better in Intermediate Algebra or an equivalent course at anytime in their lives.

III. Developmental Courses

Research/Effective Practice

The following practices are cited from two sources:

1. *What Works* by Dr. Boylan. This monograph reports on a 1999 national benchmarking study that was a collaboration of the National Center for Developmental Education, the Continuous Quality Improvement Network, and the American Productivity and Quality Center
2. *NADE* (National Association of Developmental Education) *Self Evaluation Guides*
 - A set of common goals exists for all developmental courses in the same discipline.
 - Measurable objectives exist for each course, and material is carefully sequenced

- There is a clear sequence and linkage of developmental courses with college level courses. (Exit criteria for developmental courses is clearly aligned with entry requirements for college level courses.)
- Critical thinking, learning strategies and active learning are hallmarks of all developmental courses.
- Classroom assessment techniques are a regular part of developmental courses.
- Formative evaluation is used to improve courses.
- Professional development is consistently provided for instructors of developmental courses.
- Adjunct faculty are treated as a valued resource, but teach no more than 50% of developmental course offerings.

LMC Current Practice (2007)

Developmental math and English courses have updated course outlines containing student learning outcomes aligned with the program's learning outcomes. SLOs focus on critical thinking/problem-solving as well as effective learning skills. Formative evaluation of capstone courses in the developmental English sequence (English 90) and the developmental math sequence (Math 30 Intermediate Algebra) occurs every two years with an assessment of student work on final exams or papers from across sections of these courses. Assessment results are used to inform professional development activities and curriculum revision.

IV. Student Support

Counseling Intervention in Developmental Courses

Research/Effective Practice

In *What Works: Research-Based Practices in Developmental Education*, Hunter Boylan emphasizes the need to integrate academic and student services for students in developmental education. He states, "It is essential that all courses and support services connected with developmental education be viewed as a system rather than as random activities." (p.28)

Martha Maxwell in "The Role of Counseling in a Comprehensive Developmental Program for Post-Secondary Students"(1997) argues that "counseling should be an integral part of a successful developmental education program" (p.1). She contends that students often need help to overcome "affective blocks" based on prior negative experiences in school and to plan effectively for their future. Maxwell recommends that counselors be "an integral part of the developmental program team" and work to "reduce

the perceived formality and distance of counseling by making it more accessible to students.” (p.2)

Counseling support that is integrated into academic courses and programs is part of effective practice B.3 in *Basic Skills as a Foundation for Student Success* (p. 28). Studies cited in this literature review show that developmental education programs with integrated counseling and advising services have improved course success rates.

LMC Current Practice (2007)

The Counseling Partnership is a collaboration between counselors and instructors who teach English 70 (two-levels below 1A) and Math 12 (Prealgebra). Counselors make two in-class presentations, one at the beginning of the semester to introduce students to student support services and one at the end to answer questions about registration and encourage persistence. Instructors design assignments to reinforce the counseling presentation and require students to meet with a counselor to obtain an educational plan.

The goals of the Counseling Partnership are:

1. Students will have an educational goal, including a major, or at least an understanding of the eventual need to declare a major.
2. Student will identify possible obstacles to successful completion of their courses, and will be able to access resources to help them overcome these obstacles.
3. Faculty will advise students of next level course recommended by week 10.
4. Students will have an educational plan prior to registration period for the following semester.

Lab services: Reading and Writing Center

Research/Effective Practice

The National Writing Centers Association (Simpson, 1985) offers the following basic guidelines for operating a writing center.

1. Because writing is a skill used in all subjects and at all levels of the educational process, a writing center should be considered a support service for the entire institution rather than simply for a single department. Although the budget and staff of a writing center may come from a single department, the mission of the center and its constituencies should encompass the entire institution.

2. Regardless of its organization and design, a writing center should be based on the idea of individualized instruction. Therefore, materials and methods chosen for writing centers should be adjusted to individual needs.
3. Access to the writing center should not be limited by a student's level of preparation or physical capabilities.
4. The writing center should have instructional goals that are clearly understood by tutors and students.
5. Writing center records should provide for continuity of instruction regardless of how its staff is organized.
6. A writing center should have clearly stated, consistent, and ethical principles to guide its tutors. The National Writing Centers Association suggests the following:
 - Tutors should be provided clear explanations of writing center procedures.
 - Tutors should neither directly nor indirectly offer criticism of a teacher's assignments, methods, or grading practices.
 - Tutors should be given guidelines for defining acceptable and unacceptable intervention in a student's writing process.

In *Basic Skills as a Foundation for Student Success* effective practice D.10 focuses on comprehensive academic support services. "Since most developmental students simultaneously enroll in transfer or occupational courses, learning assistance programs are particularly important for students' ability to successfully move through their courses of study." (p. 62) However, in the summary of the literature on academic support services, the authors emphasize that "when these services are created for the sole support of basic skills students or dedicated solely to the goal of remediation, they also suffer a kind of marginalization in the community college community. The effect, unfortunately, dissuades students from usage rather than encouraging it because the service is seen as a designation for failure or inadequacy." (p. 63)

LMC Current Practice (2007)

The Reading and Writing Center (R&WC) provides reading and writing support to all students, staff and faculty. Staffed primarily by faculty consultants and graduate students, its mission is to work collaboratively with students and faculty as they work through the reading and writing process, providing strategies, feedback and motivation. In addition to English faculty and graduate students, the R&WC employs faculty from different disciplines as writing consultants to achieve the dual goals of providing better support to all students and initiating faculty across disciplines into the realities and possibilities of working with students on their reading and writing issues. The consultants meet monthly for professional development training. The R&WC is supported by funds allocated through positive attendance.

Lab Services: Math Lab

Research/Effective Practice

In *What Works: Research-Based Practices in Developmental Education*, Hunter Boylan cites a variety of studies that support one of the major findings of the National Study of Developmental Education: “programs in which classrooms and laboratories are fully integrated had significantly higher pass rates in developmental courses than programs in which there was little integration.” (p. 64)

Classrooms and laboratories are not integrated just because they exist or because students taking classes occasionally use labs. Integration is characterized by

- instructors and lab personnel that work closely together to design lab experiences that are directly related to course goals and objectives;
- a requirement that students participate in lab activities as part of their course assignments and lab activities count into the course grade;
- labs that are in reasonably close proximity to the courses they support.

LMC Current Practice (2007)

With the exception of some of our arithmetic courses, all math courses at LMC have one to two hours of lab “by arrangement” as part of their design. The lab is open to students at all levels of math. Lab assignments include activities from a locally authored activities packet or computerized assignments. The math lab is located in the same building that houses math classrooms. It consists of a tutoring lab, a study lab, a computer lab, and a testing room. It is open six days a week for drop-in help and is staffed by math faculty, classified staff, and a few advanced student tutors.

Tutoring

Research/Effective Practice

Research indicates that tutoring is a key component of successful developmental education programs (Casazza & Silverman, 1996). The research is inconclusive about the relative effectiveness of group vs. individualized tutoring, the use of peer vs. professional tutors, or the location of tutoring in academic support services such as a learning assistance center vs. a learning lab associated with a department. However, the research is definitive about one aspect of successful tutoring programs: training. The National Study of Developmental Education followed over 6000 developmental education students nationwide in both 4-year and 2-year colleges from 1989 to 1996. From that large study, a number of reports were issued on various components of developmental education programs and their impact on student success. Martha Maxwell, in *Evaluating Peer Tutoring* (1996), cites one such report issued in 1992 that found that “tutor training is the best programmatic indicator of successful college developmental programs. Institutions

that graduate more than 75% of their developmental students are more likely to have tutor training programs than those with low graduation rates where fewer than 25% graduate” (p.6). According to Boylan (2002), “one of the most effective ways of improving tutor training is to participate in the College Reading and Learning Association Tutor Training Certification Program. This program provides guidelines for tutor training and allows tutoring programs to certify tutors at varying levels of expertise...” (p. 50)

In *Basic Skills as a Foundation for Student Success* effective practice D.10 includes peer tutoring and emphasizes the need for systematic tutor training and evaluation of tutoring services.

LMC Current Practice (2007)

Developmental English courses (English 60, 70 and 90), as well as arithmetic, prealgebra, and Elementary Algebra, have at least one in-class lab hour that is designated as time for personalized instruction. In these courses, with the exception of some of the arithmetic courses in which tutors are integral to the personalized mode of instruction, instructors may choose to have one or more tutors in-class during this hour or they may design other opportunities for students to receive individualized help, such as activities in the computer lab.

Tutor training is consistent with CRLA guidelines and evaluated by the tutors via a survey. Tutors who work in developmental math and English classes attend a 10-hour pre-semester training, conducted by a campus tutor coordinator, and enroll in a Human Services course, taught by English and math faculty, for on-going training throughout the semester. Both courses include material on tutoring techniques and Socratic questioning, study skills, cultural considerations, learning styles, learning disabilities, and some English or math content, such reading strategies from the Reading Apprenticeship.

In-class peer tutoring is evaluated through student and instructor perception of the tutor’s effectiveness, with specific survey questions keyed to each department’s tutoring goals.

V. Faculty Development

Research/Effective Practice

In *What Works* (2002), Boylan cites several studies that highlight the impact of professional development and training on student success. He concludes, “No matter what component of developmental education was being studied, an emphasis on training and professional development improved its outcomes” (p.46). Programs with a strong professional development component yield better student retention rates and better student performance in developmental courses than programs without this focus. (Boylan, Bonham, Claxton, and Bliss, 1992). The evidence is clear. Successful developmental education programs make staff development a priority, and make sure that adjunct faculty participate in professional development activities. Boylan recommends ongoing, long-

term programs over “one-shot” approaches and a combination of discipline-specific and overall instructional/learning strategy topics.

Nowhere is professional development more imperative than in the design and delivery of basic skills education. Norton Grubb, author of *Honored But Invisible: An Inside Look at Teaching in Community Colleges* (1999), is critical of the “skills and drills” approach that historically has dominated remedial coursework. He refers to this as a behaviorist approach, and agreeing with the philosophy espoused by Bartholomae and Petrosky, states that “implicitly instructors in this tradition assume that literacy and numeracy are individual skills, following a set of formulaic rules, rather than forms of social communication and practices where individuals must have a deeper understanding of the purposes of reading, writing and mathematics in different settings” (Grubb, p. 3). The latter he refers to as constructivist approaches that are student-centered and meaning-centered. In the absence of structured opportunities to engage in dialogue about good teaching practices and to construct coherent philosophies of teaching that emphasize meaning-making, individual instructors are more likely to turn to conventional approaches with which they are most familiar. He states

Thus the very absence of discussions about pedagogy within a college and the absence of any institutional mechanisms to prepare developmental instructors (especially part-timers) are indications that instruction has veered in the direction of skills and drills. Instead, community colleges that want to improve the quality of their developmental programs need to have explicit discussions about pedagogy, explicit agreements and mechanisms to move those agreements into practice. (p.4)

In *Basic Skills as a Foundation for Student Success* effective practices C.1 through C.5 focus on staff development.

LMC Current Practice (2007)

The primary approach we have taken to sustaining the developmental education initiatives is the establishment of Teaching Communities. 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

Teaching Communities meet throughout the semester to investigate some aspect of teaching and learning. Frequently, they are comprised of faculty teaching the same course and are focused on a collaboratively developed research question, though we have also experimented with seminars on the Scholarship of Teaching and Learning in which faculty pursue individual classroom-based research projects. Faculty participating in a Teaching Community are often required to apply concepts learned from the discussion of assigned readings in math or English education literature by producing artifacts such as lesson plans, class activities, an analysis of student work, or a course portfolio.

Faculty participation in Teaching Communities is supported by the college with an annual budget of \$24,600 divided evenly between math and English.

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