Chapter 1

Organizational and Administrative Practices

AS INSTITUTIONS SEEK to improve their efforts to provide effective developmental education, a common question is "What is most important? What shall we do first?" Although the answer to this inquiry depends to a great extent on the assessed strengths and weaknesses of the efforts on individual campuses, most institutions would do well to examine key elements of their administrative and organizational practices as a first step toward addressing overall effectiveness. How strong is the institutional commitment to developmental education and how is this commitment demonstrated? How does the institution determine its optimal organization of program components, and what steps are taken to ensure appropriate levels of integration and coordination? Is there, in fact, a developmental education program that is viewed holistically as a vital, mainstream mission of the college on a par with transfer or occupational preparation?

As one of many functions occurring within a college, developmental education must be examined within its wider institutional context. Institutional choices concerning program structure, organization, and management matter, and have been related to the overall effectiveness of developmental education programs. In many respects, these organizational and administrative practices provide a foundation on which to create the essential conditions that foster effective practices at the programmatic and instructional levels. These conditions are *enablers*: practices that, if strengthened, pave the way for positive outcomes across all segments of the developmental program. Similarly, the overall performance of developmental education programs is impaired when these elements are not given sufficient consideration.

Ideally, developmental education programs and services will have been implemented at the institutional level with great deliberation and careful consideration of many potential strategies. In many colleges, this level of meticulous planning may not be evident, with more organic, less directive approaches driving development. Over time, changes in institutional conditions (for example, student demographics, institutional culture, executive leadership, and so on) also result in fundamental shifts of organizational

focus that may have an impact on the delivery of developmental education. Vigilance is needed to ensure that the impacts of such shifts are purposeful and intentional, and not simply the result of organizational drift. The following effective practices included in this chapter are supported by the published literature and provide a lens for examining organizational choices as they relate to delivery of developmental education.

1.1. Developmental education is a clearly stated institutional priority.

1.2. A clearly articulated mission based on a shared, overarching philosophy drives the developmental education program. Clearly specified goals and objectives are established for developmental courses and programs.

1.3. The developmental education program is centralized or is highly coordinated.

1.4. A comprehensive system of support services exists and is characterized by a high degree of integration among academic and student support services.

1.5. Institutional policies facilitate student completion of necessary developmental coursework as early as possible in the educational sequence.

1.6. Faculty who are both knowledgeable and enthusiastic about developmental education are recruited and hired to teach in the program.

1.7. Institutions manage faculty and student expectations regarding developmental education.

1.1. Developmental education is a clearly stated institutional priority.

An authentic institution-wide commitment to developmental education is widely cited in published literature as a characteristic of colleges with exemplary programs. Roueche and Roueche (1999) conclude that positive student outcomes in developmental programs are more likely to occur when institutional leaders establish high standards for success, expect everyone involved to work toward achieving program goals, and create appropriate supporting frameworks for program success. Based on analysis of a large volume of literature and research studies, Boylan and Saxon (2002) further noted that commitment at the institutional level is repeatedly cited as a key factor in successful remediation. In a study of 28 exemplary programs, developmental education was rated as "completely" or

"extensively" important when assessing institutional priorities in all but one case (Boylan, 2002). A study of developmental education in Texas colleges and universities also found that programs with the highest student retention rates were located in institutions that considered developmental education to be a priority (Boylan & Saxon, 1998).

An institutional focus and acceptance of remediation as a mainstream activity of the college are communicated via public declaration of administrative support as well as through appropriate allocation of resources. McCabe (2000) makes an explicit recommendation that community colleges give remedial education higher priority and greater support, stating:

> *Institutional commitment to underprepared students is of greatest importance. Successful remediation occurs in direct proportion to priority given to the program by the college. Most important is a caring staff who believe in the students and in the importance of their work. Presidential leadership, in word and deed, is critical to success. (p. 49)*

In California, the Community College Board of Governors (the body that regulates the statewide implementation of legislation affecting the 110-college community college system) echoed this notion in a study characterizing "best-practice" institutions as those in which the success of underprepared students is a stated institution-wide priority accompanied by adequately staffed and funded developmental education programs (California Community College Board of Governors, 2002). Other evidence of institutional commitment includes publicizing program results, featuring developmental courses and services prominently in college publications, and including developmental educators in discussions and decisions with respect to broader campus planning and implementation of academic programs.

In recent years there has been an increase in the number of institutions that have begun earnestly examining student outcomes and identifying achievement gaps. This scrutiny has often provided momentum for campus leaders to establish broad-based initiatives to change the way developmental education is valued and delivered in their institutions. In 2004, 27 community colleges were selected by the Lumina Foundation to participate in the "Achieving the Dream" initiative to enhance student success, particularly among low-income students and students of color. This initiative requires that colleges undertake comprehensive activities with the goal of building a culture of evidence to transform their operations on a large scale. Twenty-one of the participating colleges chose to focus their projects specifically on developmental education, bringing this key function into the academic and social mainstream. Although these projects

are still in the early stages of evaluation, the near-universal identification of developmental education as the focus of institutional commitment for these projects is promising (Brock et al., 2007).

An example of an institutional commitment to developmental education is illustrated by the comprehensive planning and assessment conducted by Davidson County College (DCC) in North Carolina. Beginning in 1999, DCC selected developmental education as a theme for its accreditation self-study. The institution then undertook a multiyear assessment, planning, and implementation process, employing external expert consultants as well as internal task teams charged with examining current practices in the context of research-based effective practices. Following extensive planning and review, these teams made recommendations for strengthening college functions in the areas of advisement, assessment, coordination and learner support, communications, evaluation, and curriculum development; these recommendations were formalized in the institution's 2001 strategic plan. In implementing the broad-based elements contained within its plan, DCC made a cultural shift in which the functions of developmental education were embraced across the college by stakeholders who had by then spent several years studying these issues in the context of their own college.

Although dedication on the part of executive leadership is unquestionably vital in promoting institutional focus and primacy of the developmental education program, a true institutional commitment relies on the broader buy-in on the part of faculty and staff. Kozeracki and Brooks (2006) argue that developmental education must be cast in a more inclusive way in which faculty outside of the traditional disciplines of reading, writing, mathematics, and ESL embrace their roles and responsibilities toward developmental students. If one primary role of developmental education is to facilitate students' transition from remedial to college-level courses, then developmental courses must be fully integrated into the curriculum. Moreover, the effects of underprepared students who enroll in subject area courses without any specific prerequisites are felt by faculty in these disciplines. These faculty "meet the students where they are," even if they do not officially teach a remedial course. According to Kozeracki and Brooks (2006), an institutional commitment exists when faculty in all areas cease to see developmental education as the singular purview of a few areas, and instead accept it as a shared purpose central to their work in the college.

The degree to which developmental programs and services are comprehensive and institutionalized are two key factors in evaluating the extent of institutional commitment and prioritization. A strong correlation has been repeatedly documented between the comprehensiveness of an

institution's developmental education programs and positive impacts on student learning. Isolated basic skills courses have been shown to be the least likely to produce long-term gains in student achievement, whereas programs that incorporate an increasing sophistication of learner support and cross-disciplinary learning "systems" are the most effective (Kiemig, 1983). In order to create and maintain such systems, institutions must place a high value on basic skills programs and see them as fundamental to the institutional mission.

The level of institutional support and priority accorded to developmental education programs are also expressed in the sufficiency of course offerings and support services to meet student needs. Colleges that prioritize developmental education constantly monitor student placement and enrollment data, and make every effort to maintain sufficient access for students entering at all levels of the program. Because basic skills learners already require extended time frames to complete their educational goals, best-practice colleges strive to avoid further delays caused by insufficient course offerings or lack of other necessary services. To the extent that providing access involves extra efforts at recruiting and maintaining sufficient staff, purchasing additional materials, or enhancing administrative structures, these colleges accept this responsibility for achieving the desired level of functionality.

The commitment to embedding systematic, comprehensive systems for developmental education requires increased institutional investment, but doing so has been associated with increased short- and long-range program outcomes (McCabe & Day, 1998). In an analysis of twenty educationally effective institutions that consistently had higher than predicted graduation rates relative to matched peer institutions, Kuh et al. (2005) demonstrated a significant correlation between student success and institutional leadership that consistently made student success a priority message. These authors also indicate that financial and moral support provided by leaders was an essential component in institutional effectiveness, as well as the promotion of complementary academic and social programs accessed by large proportions of students (as opposed to "boutique" programs supporting smaller targeted groups).

Roueche and Roueche (1999) also confirm that a systemic approach offers the greatest potential for the success of developmental students, and that the developmental program should be "one part of an institution-wide commitment to success for all students" (p. 29). Practitioners and professional organizations in New York State have also offered policy recommendations emphasizing institutional commitment as a key component of successful programs (Neuberger, 1999; Ritze, 2005).

1.2. A clearly articulated mission based on a shared, overarching philosophy drives the developmental education program.

Subscribing to an overarching, articulated philosophy of developmental education that is shared among all institutional stakeholders is an acknowledged best practice according to a variety of literature sources (Boylan, 2002; California Community College Board of Governors, 2002; Roueche & Roueche, 1999; McCabe, 2000). Developing and adopting such a philosophy should be the result of a highly coordinated effort involving multiple stakeholders. Researchers have concluded that the success of community college developmental education programs depends on faculty having a clear understanding and commitment to the philosophy and objectives of developmental education that are espoused by the institution (Sheldon, 2002). "Best-practice" institutions are encouraged to assign faculty to developmental courses only after they have been oriented to this shared institutional philosophy and the associated institutional expectations for desired student outcomes (Boylan, 2002) (see also Practices 1.6 and 1.7 in this section).

In addition to having a unified mission and philosophy of practice, successful developmental education efforts feature clearly specified goals and objectives for all courses and programs. Roueche (1973) notes that clear-cut goals are essential, both to set student expectations and to influence the development of a cohesive course structure having solid alignment between exit and entry skills across sequential levels. Further, the National Study of Developmental Education (Boylan, Bonham, Claxton, & Bliss, 1992) found that developmental programs with written statements of mission, goals, and objectives had higher student pass rates in developmental courses than programs without such statements. Other studies connected mission, goals, and objectives with higher pass rates on state-mandated tests and higher year-to-year retention rates for developmental students (Boylan & Saxon, 1998). The National Association of Developmental Education recognizes the importance of this element in effective programs and requires all programs seeking its certification to describe their philosophy, goals, and objectives for developmental education.

1.3. The developmental education program is centralized or is highly coordinated.

A considerable body of research has examined the role of program organization as it relates to effectiveness of developmental education efforts.

The consensus view among researchers originally established that a centralized model of program and service delivery was superior to a more distributed "mainstreamed" model (Roueche & Baker, 1987; Boylan, Bonham, Claxton, & Bliss, 1992; Boylan, 2002).

A centralized organizational structure places the delivery of all remedial courses, programs, and services in a separate department, supervised by a dedicated department administrator, with its own identified line of budgetary and other resource support. Advantages cited for this model include more accessible, highly integrated support services, and greater likelihood that faculty teaching remedial courses will be highly motivated and have specific expertise regarding developmental learners (Perin, 2002). Various studies have connected the centralized model with higher student retention and course success, as well as with higher first-term and cumulative grade point average (GPA) (Roueche & Baker, 1987; Boylan, Bliss, & Bonham, 1997; McCabe & Day, 1998). Evidence further suggests that the centralized model is more effective for students with the lowest skill levels. Furthermore, when surveyed for their opinions concerning the most desirable structure, many faculty identified a centralized model as being most beneficial to the students (Perin, 2005).

Despite the finding that centralized programs lead to more positive student outcomes, only a minority of community colleges nationally operate from a centralized department. One source reports that this structure occurs in 38% of two-year colleges (Shults, 2000); a more recent study finds that 44% of sampled colleges reported having centralized developmental education programs (Gerlaugh, Thompson, Boylan, & Davis, 2007). The alternative model, referred to as mainstreaming, distributes the teaching of remedial courses among various academic departments, and those individual departments may teach both college-level and remedial courses. Advantages cited for this model include greater cost efficiency, better alignments between remedial and college-level courses, greater communication among faculty across levels (for a consistent transmission of college-level expectations), and reduced stigma attached to students who are not isolated in a separate department (Perin, 2005; Academic Senate for California Community Colleges, 2003).

In any intentional effort toward restructuring to provide for centralized delivery, concerns regarding the separation of developmental courses and programs need to be addressed. Grubb (1999) observes that separation can relegate developmental programs to "a low-status activity, the custodial or housekeeping department of college-level instruction" (p. 171). In 1991, the Academic Senate for California Community Colleges (2000) recommended

against the centralization of basic skills into a stand-alone discipline, fearing that "the establishment of a separate basic skills discipline would lead to a two-tiered system, where basic skills students were regarded as inferior" (p. 7). While the preponderance of research-based evidence does favor the centralized model, colleges that choose to move in that direction must clearly be mindful of any negative perceptions or stigma and take purposeful steps to communicate the rationale for the structures adopted.

Further studies have concluded that the demonstrated superiority of student outcomes associated with the centralized model may not be due solely to the structural organization, but may instead arise from the higher level of communication and collaboration associated with centralization (Boylan, 2002). This interpretation suggests that decentralized programs might achieve the same benefits with respect to student achievement as centralized programs, provided that they are highly coordinated. Boylan (2002) argues that decentralized programs still demand "coordination of developmental programs and services by an administrator with primary responsibility for campus-wide developmental education" (p. 11). Additional traits of a highly coordinated decentralized effort include the following: regular meetings of all those involved in the delivery of developmental courses and services, articulation of common goals and objectives for all developmental courses and services, and the integration of developmental courses and academic support services.

A number of other factors have been identified that relate to the choice of developmental program organization. Some colleges may prefer to distribute developmental students across departments so that the whole college shares responsibility for their progress. Other factors involved in the choice of program structure include student placement policies, the size of the institution and its academic departments, and institutional politics. Appreciating the diversity of institutional contexts and local conditions, the research literature fails to arrive at a consensus recommendation for a single "best" structural model for the organization of developmental programs across institutions. However, a strong message concerning the need to collaborate and coordinate among program components emerges as a consistent finding reported by various published sources.

In an effort to strengthen coordination in an environment where developmental courses were distributed among academic departments, one Florida community college created a new associate dean position. This individual was given primary responsibility for coordinating the various services provided to underprepared students. She also worked closely with department leaders from English, math, and college success (Freshman

study skills), each of whom was also given release time for curriculum development and evaluation of programs. This hybrid approach might be considered as one possible way to provide for centralized coordination while still maintaining the discipline-based knowledge and connections needed to achieve integration of the developmental program with college-level courses.

1.4. A comprehensive system of support services exists, and is characterized by a high degree of integration among academic and student support services.

The majority of studies of best practices in developmental education call for the offering of comprehensive support services for remedial students (McCabe & Day, 1998: Neuberger, 1999; Raftery, 2005; Boylan, 2002; Roueche & Roueche, 1999). A review of 51 developmental programs reported that the "programs that showed the greatest gain in scores, GPA improvement, and retention also tended to be comprehensive in scope, mission, and services" (Boylan, 1983, p. 32). The impact of fully integrated systems that engage faculty and staff across all segments of the institution are clearly documented in a recent study to determine which community college management practices were associated with increased student success. Jenkins (2006) concluded that comprehensive, well-integrated delivery structures were associated with improved student outcomes. He writes:

> *Our findings suggest that, to promote student success, not only do particular student support services . . . need to be in place, but they must be well-aligned and coordinated across the campus. While administrators may see different functional areas of the college as providing discrete services, students do not see, nor should they experience, such divisions. Seamless integration of services from the students' perspective and collaboration among faculty, staff and administration in providing these are the college characteristics that seem to contribute most to student success. (p. vi)*

Support systems have been described as existing at four "levels," representing increasing potential to produce positive program outcomes (Kiemig, 1983). At level one, remedial courses exist in isolation, with no additional outside support provided. Level two programs offer some additional learning assistance, such as generalized tutoring not connected to individual courses. Course-related learning assistance is provided at level three, in which trained personnel who have specific information about course content, assignments, and expectations engage with students either

inside or outside of class. Level four is characterized by the presence of comprehensive learning systems (for example, learning community models) in which all participants share the responsibility for providing monitoring, advisement, and instructional support.

Roueche and Roueche (1999) have explicitly called for colleges to examine the comprehensiveness of support services available to developmental students, emphasizing that "colleges must increase the support and structure they offer at-risk students who need support and structure more than any other students in higher education" (p. 29). The essential services include mandatory orientation, assessment and placement, expanded preenrollment activities, establishment of peer and faculty mentors, and more comprehensive financial aid programs. Integrated services combined with developmental coursework are further cited as contributing to student retention in Heisserer and Parette's summary of several studies (2002).

Developmental students who have the services of a comprehensive learning assistance program available to them have been shown to make larger gains in academic performance than those who do not (Neuberger, 1999). One approach to offering integrated, comprehensive support for developmental students is the use of Learning Assistance Centers (LACs). Maxwell's (1997a) review of the literature concerning these centers concluded that effective LACs commonly contain the following functions:

1. Academic evaluation and diagnostic testing

2. Instruction in study skills and learning strategies

3. Peer tutoring or professional tutoring, or both

4. Supplemental instruction, or course-related, systematic, and highly structured group tutoring

5. Computer-assisted instruction and access to other educational technology

6. Credit and noncredit developmental courses

7. Faculty services, such as research opportunities, assistance in developing SI programs, cooperative learning demonstrations, and classroom support materials

8. Publication of LAC programs through newsletters and class and faculty visits

9. College administrators who are informed about LAC programs and services

10. Staff training and development activities

11. Referral services to other programs and services on campus

12. Close relations with offices that provide personal, financial, educational, and career counseling and providing training for peer counselors

13. Integration with advising departments and faculty advisers

14. Program evaluation

Self-contained programs, such as California's Extended Opportunity Programs and Services (EOPS), which provides academic and support services for low-income and educationally disadvantaged students, also model the integration of a variety of student support services with academic instruction. These one-stop programs typically include counseling and advising, direct financial assistance, health and child care services, directed tutorial and other academic support services, and assistance with university transfer. The challenge for colleges often becomes one of scale—how to expand the service model operating effectively for small groups to one that can be implemented across the institution. The pervasiveness of an integrated systems model can be regarded as a reflection of the institutional commitment to developmental education for all students.

1.5. Institutional policies facilitate student completion of necessary developmental coursework as early as possible in the educational sequence.

There are two schools of thought related to how students should complete developmental courses versus other college courses. If existing assessment procedures are presumed to be accurate indicators of a student's actual level of preparation (and to the extent that basic skills competence is actually required for success in college-level courses), it is logical to infer that students are best served by completing preparatory developmental coursework prior to enrolling in other nondevelopmental courses. On the other hand, mandatory completion of a comprehensive basic skills pathway prior to enrollment in other courses slows students' progress and may be seen as stigmatizing or restricting students' engagement with the overall college experience. Concurrent enrollment in carefully selected academic or vocational courses outside of basic skills areas may help in sustaining student motivation and providing early successes that will enhance persistence. Acknowledging that both views have merit, research overwhelmingly supports the notion that early assessment and completion of developmental coursework improves student achievement.

Weissman, Bulakowski, and Jumisko (1997) examined the timing of remediation in relation to overall program effectiveness. In a study of 2,028

college-ready students and 1,254 underprepared students entering in the same semester, researchers reported that completing developmental education courses during the first year of enrollment increased persistence, especially for those students least prepared for college-level courses. They also found that students who took developmental education courses during their first term of enrollment remediated at a much higher rate than students who did not attempt any developmental courses during their first semester. They concluded that their study supports a policy of requiring underprepared students to begin their developmental courses upon initial enrollment.

Similar findings have been reported in another nationwide study, the Achieving the Dream initiative. This study of 27 colleges found that students who successfully completed any developmental course in their first term of enrollment were more likely to persist and succeed from that point forward than those in any other student group, including those who attempted but did not complete developmental courses, and even those who did not require remediation in the first place (Community College Survey of Student Engagement, 2007).

The actual practices of colleges with respect to the simultaneous enrollment of students in developmental and regular college coursework vary. In 1996, about two-thirds of colleges placed some restrictions on the regular academic courses that students could take while enrolled in remedial coursework; only one-third had no such restrictions. At least one study has compared success among college-ready students, underprepared students who did not remediate, underprepared students who completed remediation, and underprepared students concurrently enrolled in college-level courses (Castator & Tollefson, 1996). These authors found that underprepared students who had remediated and underprepared students concurrently enrolled in developmental and college-level classes earned grades comparable to those of college-ready students, whereas underprepared students who did neither had lower grades. They conclude that colleges are justified in implementing policies requiring completion of remediation either prior to or concurrent with enrollment in college-level courses.

Some practitioners fear that relegating students to a core of developmental courses that must be completed prior to entering other course offerings may create a "two-tiered" system, singling out and perhaps marginalizing students in these programs. In arguing for concurrent enrollment, Maxwell (1997c) asserts that college skills programs have historically been hindered by "enduring faculty myths." One persisting myth is that underprepared students will learn more if taught in separate classes removed from the

main body of students. The fact that students do sometimes succeed when simultaneously enrolled in both developmental and college-level courses is offered as an argument that prerequisite remediation is not needed. Grubb (1999) asserts that "the idea that remediation has to precede content learning creates a teaching problem" (p. 184), in that such actions may tend to reduce students' cognitive development activities to repetitive "skill and drill" exercises, disconnected from meaningful applications in content areas. To the extent that such practices characterize the usual methods employed in developmental courses, the point is well taken. However, if developmental courses are designed to develop enhanced critical thinking and to scaffold learning in ways that contribute to increased self-regulation and self-efficacy, such experiences may instead enhance student preparation for higher-level study.

Boylan (2002) observes that students are rarely exposed to instruction in critical thinking in high school; developmental students' particular lack of this key ability leads to increased failure for these students. As developmental instruction moves away from simple repetitive practice to a more fully developed focus on critical thinking and learning strategy development, the acquisition of these foundation skills has great potential for improving subsequent success in a variety of content disciplines. Boylan argues that this shift in approach during the earliest developmental courses may help students reduce the overall time spent in remediation.

1.6. Faculty who are both knowledgeable and enthusiastic about developmental education are recruited and hired to teach in the program.

The pivotal role of faculty in developmental programs underscores the need to ensure that these key personnel are knowledgeable, experienced, and motivated to work with developmental learners. Roueche and Roueche (1999) argue that success of developmental students is predicated on faculty attitude and competence, and they call for a mandate to recruit, develop, and hire the best faculty. These same authors note that instructors who choose to teach remedial classes as opposed to being assigned to them were characteristic of successful developmental programs. McCabe and Day (1998) also recommend the use of "instructors committed to the students and the field" (p. 22). O'Banion (cited in Cooper, 1979) goes so far as to recommend that remedial instructors' discipline should be developmental studies. Perin (2005) recommends hiring instructors with experience and training in developmental education who are sympathetic to the

needs of at-risk students, and further notes that this recommendation is more likely to be achieved in a centralized departmental structure than in a mainstreamed model (see Practice 1.3). At the recommendation of its executive board, the New York College Learning Skills Association also advises the hiring of "appropriately credentialed, trained, educated, and experienced faculty and professional staff" (Neuberger, 1999).

Despite these and other numerous references identifying recruitment and hiring of eager, trained faculty as an exemplary practice, only 20% of institutions in a national study reported requiring full-time faculty to possess specific training for developmental education before teaching remedial courses (Shults, 2000). Furthermore, there is a noticeable gap in the research-based literature connecting these desired criteria with any documented increase in student achievement or any other student outcomes. In a related statement, however, Boylan (2002) does find a correlation between negative attitude of faculty toward developmental education and poor developmental program outcomes, but details of the specific effects are not noted.

Assuming that knowledgeable, well-prepared faculty with specific developmental expertise would contribute to successful students, what are the characteristics of such faculty? The Academic Senate for California Community Colleges (2003) suggests that the attributes of effective developmental educators include the following:

- Demonstrates content knowledge and the ability to deliver the content
- Varies instructional delivery methods
- Maintains organized and structured activities
- Possesses knowledge of learning styles and how to apply this information
- Provides critical-thinking activities
- Relates the curriculum to the real world and careers
- Actively engages students
- Maintains high academic standards
- Engages in classroom research
- Engages in professional development activities
- Chooses to teach underprepared students; demonstrates a passion for working with these students
- Enjoys and respects students
- Sees the whole student

- Creates a "classroom community" learning environment
- Motivates students
- Engages in "intrusive" (proactive) student activities
- Encourages students to use all available support services
- Maintains an innovative spirit
- Knows how to and enjoys working with teams (p. 12)

A similar list of attributes offered by Casazza (1996) adds consideration of the affective needs of learners, the ability to assess strengths and weaknesses and communicate them to the learner, the ability to assess individual development, and the ability to gradually release responsibility for learning and self-assessment to the learner.

A number of researchers mention the role of adjunct faculty in teaching remedial courses, but reports vary on the proportions of adjunct versus full-time faculty teaching developmental courses. A recent national study of developmental education at 45 two-year institutions reports that only 21% of developmental courses were taught by full-time faculty, but notes that this is an increase of 4% from data reported 10 years earlier in a similar study (Gerlaugh, Thompson, Boylan, & Davis, 2007). Data from a study conducted in 2000 (Shults, 2000) reported a much higher percentage of full-time faculty teaching remedial courses in two-year institutions nationwide (33%). However, when noncredit courses are included, the proportion of adjunct faculty in the national workforce would likely be considerably higher.

Community colleges rely heavily on an adjunct workforce to deliver the transfer, occupational, and basic skills curriculum. Many educators assume that reliance on part-time faculty compromises student learning and potentially erodes academic standards; however, little research has been conducted to analyze the specific effects of part-time instruction. Using the National Center for Educational Statistics data, Jacoby (2006) evaluated evidence regarding graduation, learning outcomes, and the use of adjunct faculty. He concludes that community college graduation rates decrease as the proportion of part-time faculty increases.

Other research probes the relationship between a reliance on part-time faculty and student engagement. Because part-time faculty are less likely to be integrated into the institution, they may also be less available to students, affecting student engagement and assimilation into the college culture. In a comparison of grading patterns between part-time faculty and full-time faculty (McArthur, 1999), part-time faculty had a tendency to

record higher grades, perhaps due in part to decreased job security and concerns about student evaluation results.

Although the use of adjunct faculty has been mentioned as a potential concern for effective practice, research has documented no significant differences in student outcomes between full-time and adjunct professors who teach remedial courses (Boylan, Bonham, Claxton, & Bliss, 1992). Programmatic outcomes, however, have been lower for institutions in which 70% or more of the developmental courses were taught by adjunct faculty (Boylan & Saxon, 1998). Because full-time versus adjunct status has not been shown to have a significant impact on student achievement, it may be that the time commitment for coordination, planning, and program development suffers when institutions employ large contingents of adjunct faculty. Boylan (2002) also notes that best-practice institutions identified in his 2000 study had only about 50% of remedial courses taught by adjunct faculty, and further recommends that any adjunct hired be "fully integrated into the program and considered as valuable assets to the program" (p. 56).

1.7. Institutions manage faculty and student expectations regarding developmental education.

Communication of explicit expectations for students and program providers enhances the effectiveness of developmental programs. Increasingly, students are coming to college with uninformed expectations that are not initially aligned with those of the faculty and the institutions (Venezia, Kirst, & Antonio, 2003). This mismatch results from the increasing number of first-generation college students who lack role models to convey accurate expectations and from students' experiences with the prevailing expectations in their elementary and secondary schools.

Research indicates that today's high school students report studying only about six hours per week on average; as compared with students of a decade ago, they more frequently miss class or are bored in class; and many students matriculate into college "with an entitlement mentality" (Kuh et al., 2006a, p. 32). Kuh emphasizes the importance of clearly defined expectations "because so many traditional-age students appear to start college already 'disengaged' from the learning process, having acquired a cumulative deficit in terms of attitudes, study habits, and academic skills" (p. 33).

Early attention to correcting misinformation about what students can expect in college and what mechanisms exist to support them in the college environment should be formalized to ensure that students are able to set manageable, realistic goals. Institutional values and expectations should be

clarified early and often to matriculating students, and such reinforcement should be a shared responsibility among faculty, staff, and administrators of developmental programs.

Of particular importance is the confusion that arises from the "open door" message transmitted by community colleges. This message is meant to convey the accessibility of the colleges, but it does not speak to the particular need to prepare for college-level coursework. Since many community colleges do not advertise their academic standards and placement procedures, it is important that an institution's promotional materials try to distinguish readiness from access in the interest of communicating realistic expectations.

The common perspective that "anyone can go to community college" puts many incoming students at a disadvantage. Admission to a community college does not necessarily guarantee that a student will be spared remediation before becoming eligible for credit-bearing courses. Unfortunately, the optimal time to correct misinformation about college readiness is while students are still enrolled in high school, when decisions can be made to select appropriately rigorous coursework and maintain a strong academic effort. This certainly has implications for effective practices in establishing vigorous preenrollment programs at both the state and local levels. Researchers have recommended that colleges consider assigning permanent or itinerant advisers to high school campuses to explain the institution's readiness standards and requirements that will make students eligible for college-level versus remedial tracks (Bottoms & Young, 2008).

Several states have developed initiatives aimed at assessing high school students' readiness for college and providing mechanisms to assist students with setting appropriate expectations. The Kentucky Department of Education and the Kentucky Community and Technical College system are working together to assess college readiness in the tenth grade and devising mechanisms to identify academically at-risk students earlier, so that they can use the junior and senior year to become college ready. Similarly, North Carolina has designed a specialized twelfth-grade math course for students identified in the Early Math Placement testing program, which administers college placement tests in high school. The Montana University system encourages high school juniors to take its Writing Assessment and provides a supplemental online course called Strategies for Improving High School Writing. Minnesota's "Get Ready" program, established by its Higher Education Services Office, encourages college preparation starting as early as fourth grade and sponsors a comprehensive Web site of online advising tools, college preparation and selection resources, and information

about financial aid. Two other notable informational projects are Indiana's Career and Postsecondary Advancement Center (ICPAC) and Florida's College Reach Out Program (CROP), both of which have invested substantial resources in developing data and delivery systems to help students and parents access student records and information about college requirements.

At the local level, another key point in the chronology of effective advisement occurs just after the student arrives at college and undergoes his or her initial placement testing. At that juncture, the dissonance between the student's expected placement and the reality of the recommended placement (often much lower) may be overwhelming for the student. More than simply prescribing a remedial course sequence, advisers should seize this opportunity to help students manage expectations for both their academic and social integration into the college. Effective advising will facilitate an understanding of the various implications of the course placement, address the advantages in pursuing recommended courses, and acquaint students with the resources and services available to assist them.

In a benchmarking study of best-practice institutions for developmental education, Boylan found that these institutions go to substantial lengths to make sure that faculty, staff, and students each know what is expected of them to support the developmental education effort (Boylan, 2002). Upon hiring, institutional and programmatic expectations are communicated to faculty and staff via an orientation to the program, and they are provided with continuing in-service training to ensure that they have the resources needed and are meeting the institution's expectations. One community college in Florida developed a training manual for faculty to improve the consistency of information that is provided to new faculty members regarding their roles with respect to the institution's strategic focus on student retention and success (Jenkins, 2006).

Boylan (2002) further recommends that each program should agree upon a definition of "successful developmental education" in the context of the institution, and this definition should then be widely disseminated. The activities of the developmental education program should then be publicized via newsletters, program reports, or other means so that expectations are continually managed across the institution. Boylan further emphasizes the need to specifically include adjunct faculty as part of this process, and recommends that course and program expectations be included in any written manuals or other documents provided for adjunct faculty orientation.

Conclusions

The organizational and administrative practices of community colleges clearly have a profound effect on the quality of the colleges' efforts to provide effective developmental education for underprepared students. It is not uncommon for structures and policies to evolve incrementally over time in ways that may serve particular needs but lack deliberate planning and coordination focused toward a well-defined mission or set of institutional goals. From a strategic point of view, thoughtfully assessing the organization of developmental education at the institutional level can pay big dividends by engaging a wide cross section of stakeholders in dialogue about the importance of developmental education to the mission of the college and student success all levels. With acceptance of developmental education as a shared responsibility, institutions are in a much better position to participate in meaningful assessment of programmatic and instructional practices.