Student Support Services for the Underprepared Student

By Elizabeth Wilmer

The needs of students who enter college underprepared transcend academic preparation. These students require an array of student services that will support them in their quest to achieve the academic and personal skills necessary for college-level coursework and academic success. The model I propose here is not unique, but it is comprehensive and cognizant of the holistic purpose of developmental education. It also is an ideal model. Budget limitations, personnel restraints, and implementation difficulties may make parts of this model out of reach for many VCCS colleges. However, in an ideal world, this is the model I would employ. In an imperfect world, pieces of the model may be used to improve student services for underprepared students.

Statistical Evidence

Recent reports on the level of preparation of students entering college are contradictory in their assessment of the progress made by American schools in the last ten years. "Measuring Up 2004," published in September, 2004, by the National Center for Public Policy and Higher Education, created a state-by-state report card on higher education. Overall, the report shows that we have made little progress in increasing the number of students completing college. However, on the subject of preparation, the report shows that 44 states improved their standing on more than half of the preparation measures studied over the ten-year period (Schmidt, 2004). Peter Ewell (Breneman, Ewell, McCluskey, Reindl, & Volkwein, 2004) suggests that

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the United States' educational system has responded to the 1983 "A Nation at Risk" report and has shown a clear pattern of improved preparation in elementary and secondary education. Travis Reindl agrees that while our system is better preparing students, the number of students who are attending and completing college is far too low. He suggests that a gap exists between secondary-school standards and the expectations of higher education, creating a stumbling block to student success at the college level (Breneman, Ewell, McCluskey, Reindl, & Volkwein, 2004).

Contradicting the "Measuring Up 2004" report of progress, "Crisis at the Core: Preparing All Students for College and Work," which was published in October, 2004, by ACT states, "Most of America's high school students are not ready for either college or work. We've made virtually no progress in the last ten years in helping them to become ready." The report states that only 22 percent of the 1.2 million students tested were prepared for college-level courses in English, math, and science (Jacobson, 2004) and goes on to specify that only 40 percent of students are prepared to earn a C or higher in their first college algebra class, while only 68 percent are prepared to succeed in English composition (ACT, "Crisis at the Core," 2004).

Though there are contradictions in whether or not we have made progress in preparing students over the last ten years, the fact remains that a significant proportion of students who graduate from high school are not ready for college-level work. The statistics show that only 42 percent of students graduate from high school with the skills to begin college and that of those entering college, only one in four is prepared (Hornstein, 2004). The number of institutions offering developmental or remedial courses further exemplifies this situation. A 1995 study done by the National Center for Educational Statistics (NCES) showed that, nationwide, 100 percent of public two-year institutions offer developmental coursework, while 78 percent of all colleges with freshmen offer these classes. The statistics also show that 41 percent of freshmen at two-year colleges and 22 percent at four-year institutions are enrolled in developmental courses (Stephens, 2001).

For students participating in developmental coursework, retention is a major concern. This issue is not as great for students needing remediation in only writing or intermediate algebra. However, when students need developmental coursework in reading, basic arithmetic, or a combination of subjects, their risk factor of not achieving their academic goals significantly increases. Statistics show that one in eight students needs remediation in reading. Of these students, 65 percent need remedial courses in at least three

additional areas, including math (Adelman, 1996), putting these students at risk. Adelman (1996) illustrated that while 55 percent of students who needed no remedial coursework and 47 percent of students who needed only one remedial course went on to complete their bachelor's degree, only 24 percent of students who needed three or more remedial courses completed their degree.

Remedial Education Revisited

The need for remedial coursework is not new. In the 1700s, entrance requirements at colleges such as Harvard and the College of William and Mary were based on students' knowledge of Latin and Greek and their moral character. However, with limited access to secondary schools, these early colleges found very few applicants qualified to enter college and had to initiate remedial coursework for underprepared students in order to generate enough enrollments to keep their doors open. During the early nineteenth century, many colleges admitted the sons of wealthy alumni regardless of their level or preparation. They also began admitting economically poor but academically bright students on scholarship to boost enrollment numbers (Stephens, 2001).

By the mid-nineteenth century, entrance requirements had increased substantially. A good example is the change in requirements in mathematics at Yale between 1720 and 1835. In 1720, arithmetic was not required for admittance and Euclidean geometry was a senior-level course. By 1743, geometry was a sophomore-level course; by 1825, a freshman course; and by 1845, it was an entrance requirement along with algebra (Stephens, 2001).

These increases in the rigor of college curricula and the number of students arriving without the necessary preparation led to the creation of preparatory departments within colleges. The most noted of these was at the University of Wisconsin from 1849-1880 (Stephens, 2001).

The Morrill Acts and opportunities for the education of women increased access to higher education, but also heightened the number of underprepared college students. By 1892, concern over underprepared students entering college sparked a report by the Committee of Ten, commissioned by the National Education Association, to call for the strengthening of secondary school education. They hoped that by strengthening secondary schools only fully prepared students would apply to college. This did not happen. In 1907, the majority of students who enrolled at Harvard, Yale, Princeton, and Columbia were still not prepared to meet their entrance requirements (Stephens, 2001).

In the 1940s, the passage of the G.I. Bill of Rights gave veterans, many of whom were academically underprepared, the opportunity to attend college. This landmark legislation not only provided funding for tuition but also funded services such as advising, tutoring, and programs to improve reading and study skills to accommodate the needs of the underprepared veterans. For many reasons, including maturity, motivation, and an array of support services, these students demonstrated a high degree of success (Stephens, 2001).

Access was further increased during the Civil Rights Movement of the 1960s. However, shortly after this, the baby boom generation began attending college. This enormous increase in college-bound students allowed colleges for the first time in American history to become selective in their admissions policies. This happened because they had enough college-ready students to maintain their enrollments without accepting large numbers of underprepared students (Stephens, 2001).

The gap in access created by the selectivity that emerged as the baby boom generation began college was filled by the development of junior colleges and community colleges. These colleges provided the opportunities of open access and affordable tuition to underprepared, financially needy, non-traditional, and first-generation college students (Stephens, 2001).

Who Are the Underprepared?

There is no simple description of this population. As pointed out by Higbee, Dwinell, McAdams, GoldbergBelle, and Tardola (1991), they are not easily categorized. Moore and Carpenter (1985) concluded "that the academically underprepared student pool is large and diverse in terms of age, socioeconomic condition, previous academic performance, standardized test scores, and emotional health, and is enrolled in colleges and universities of all types nationwide" (p. 100).

While recognizing their diversity, McCabe (2003) attempts to generalize their demographic characteristics by describing the underprepared student population as being more female than male; as ranging in age but with more than half over the age of 24; as often, but not always, being financially disadvantaged; as being primarily white, although a greater proportion of the Hispanic and African-American students attending college are underprepared; as being both married and single; and including both parents and non-parents. McCabe goes on to say that one-third are deficient in only one area, a third in two areas, and a third in all three areas, but that the level of their deficiency varies tremendously. His research concludes that while demographically they are similar in their diversity to the overall

population of community college students, there is evidence that they have a more difficult time connecting with the academic environment; that they are uncertain of their goals; that they have little academic direction; and that they share many of the non-cognitive characteristics seen in first-generation and minority students. He also surmises that these students are not likely to have orderly lives or to plan ahead for such things as registration or financial aid (McCabe, 2003).

While little data are available on the characteristics of the underprepared, a study by Grimes and David (1999) suggests that the attitudes, values, and self-expectations of underprepared students dramatically affect their academic preparation. They acknowledge Tinto's retention model, which reveals that family background, individual attitudes, and secondary preparation combined with the student's goals, commitment, and the institutional structure determine the likelihood of success. Grimes and David's survey of 500 community college students revealed the following:

- No significant demographic differences existed between underprepared and college-ready students.
- Underprepared students took fewer years of math, science, and foreign language in high school.
- Underprepared students planned for fewer years of college, limiting their goals to associate's degrees, while college-ready students aspired to bachelor's and graduate degrees.
- Underprepared students rated their academic ability, intellectual self-confidence, and emotional health lower than college-ready students, while showing no significant difference in ratings of physical health, competitiveness, leadership ability, social self-confidence, or artistic ability.
- Underprepared students spent more time watching television and partying, while college-ready students spent more time going to religious services, discussing politics, and socializing with ethnically diverse groups.
- Underprepared students indicated an expectation to fail one or more courses, to need extra time finishing their degree, and to need tutoring services.

From these results, Grimes and David conclude that because underprepared students have such different affective and experiential ratings, the solution to their success goes beyond simple academic preparation; only addressing skills deficits will not ensure their success. Colleges must take a holistic approach and address both their academic and

personal development. Personal development is an evolving process that cannot be completed in the course-by-course semester model used in our educational system; rather, it must be sustained as they move through their academic preparation (Grimes and David, 1999).

Higbee, Dwinell, McAdams, GoldbergBelle, and Tardola (1991) also affirm that colleges must address the non-cognitive needs of underprepared students. They concluded that a host of personal issues ranging from self-consciousness and isolation to concerns about financial or family matters to unrealistic choices about classes and majors act as barriers to their success. These issues of motivation, self-esteem, aptitude, and integration into the college environment all play a role in their ability to achieve academic success. It is only after their non-cognitive needs are met that these students will succeed and persist in the academic environment.

Importance of Assisting the Underprepared

Questions of the value and necessity of developmental education have persisted as long as developmental programs have existed. In 1852, Henry Tappan, president of the University of Michigan, argued in his inaugural address that the institution was teaching too many courses that should be relegated to the secondary schools (Stephens, 2001). These arguments have come and gone, have sparked reform, and have caused restructuring of institutions both in favor and rejection of developmental education, but the fact remains that a substantial population of underprepared students exists in our colleges. There will always be students who made poor choices in their youth, who suddenly find themselves in need of an education to support themselves and their families, or who decide late to enrich their life through education.

Helping these students to find economic and social success through education is an admirable pursuit. However, in a technological world, education is becoming a necessity. Manufacturing jobs are rapidly disappearing, replaced by information-based industries that require a highly skilled workforce. Eighty percent of future jobs will require the literacy and skills provided by a college education (McCabe, 2003). Therefore, we must find a way to prepare all students for the challenges that the future presents. Our social and economic well-being depends on it.

Defining a Developmental Partnership

Moore and Carpenter (1985) quoted Waterhouse in describing underprepared students as those who are "unsure of themselves; need success – cognitive and/or affective; need financial assistance; need tutoring

and basic skill development; possess minimal knowledge of career or educational opportunities and skills related to taking advantage of both; and need to feel comfortable within the learning environment" (pp. 96-97). Meeting these needs can only be accomplished through a strong partnership between faculty and student services.

William Salyers, former learning center director and developmental instructor, commented that any developmental education program begins with caring and concerned faculty (personal communication, October 11, 2004). The National Association for Developmental Education (NADE), whose mission is to promote issues and practices in developmental education, "defines the purpose of developmental education as the ability 'to develop in each learner the skills and attitudes necessary for the attainment of academic, career, and life goals' (NADE)" (McCabe, 2003, p. 81). McCabe (2003) goes on to say that this must be accomplished in partnership with faculty, counselors, and the students themselves and that there is no single model for success.

A Proposed Model for Success

The following model proposes an aggressive, yet reasonably achievable model for institutions dedicated to the success and retention of their developmental students. The model includes the following elements:

- a centralized organizational structure or department devoted to developmental education,
- mandatory placement testing for all new applicants who don't meet exemptions (such as a B average in high school English and math coursework or defined scores on SAT or ACT tests),
- mandatory placement in developmental courses if testing indicates the need,
- a defined list of courses for which placement scores or successful completion of developmental coursework is a prerequisite,
- advising and counseling services that place a student in first-semester courses as well as regular and ongoing personal and academic assistance throughout the student's developmental program and transition into college-level coursework,
- an early-warning system created in partnership between the student's faculty and advisor,
- a mandatory extended student-success or orientation class that is completed early in the student's college career,
- where appropriate, placement of students in developmental classes that are part of a learning-community organization or a structure of paired classes, and

• instructional support services in a variety of methods (including writing centers, math centers, professional tutors, and peer tutors).

Centralized Organizational Structure

A centralized organizational structure places all developmental courses and services under the direction of one division, department, or program. Led by a director who is familiar with the cognitive and non-cognitive needs of developmental students, this director will advocate to ensure that the instructional, support service, and physical classroom and equipment needs for the department are met. Funding for the department might be provided by the institution or through grants, but the director would be responsible for maintaining administrative support and grant funding to ensure the ongoing success of the department. This director would also coordinate the partnership between faculty and student support services.

As McCabe (2003) points out, this type of centralized organizational structure supports Roueche's 1999 recommendation that developmental education treat the whole person, rather than focusing on individual skills in isolation. It also supports Boylan's 1999 assertion that developmental education should be student-centered rather than subject-centered (McCabe, 2003). The effectiveness of a centralized organizational structure has been demonstrated in two studies: the 1994 National Study of Developmental Education and the 1995 J. Sargeant Reynolds Community College Study of Effectiveness of Developmental Education (McCabe, 2003).

The effectiveness of a centralized program is driven by the fact that the instructional and support services needed by underprepared students are different from those required by other students and are not always compatible with those provided for all students. Underprepared students are the least likely student population to seek or participate in support services. In many cases, they are resistant to support and require a more intrusive approach to providing the services necessary for their success. Because they are unlikely to seek assistance, they are more inclined to make use of services that are easily accessible, located in a single facility, and convenient to their classes, rather than those which are spread across campus (Higbee, Dwinell, McAdams, GoldbergBelle, & Tardola, 1991).

While various arguments exist for and against a centralized department, the fact remains that when a college invests the resources in such a department, it demonstrates the institution's commitment to the success of developmental students. This may be the first time that many of these students have been shown that they are important and that someone cares about their success. Furthermore, by providing a centralized structure, the

institution makes it easier for these students to access support and services and to increase communication among those who are providing the services, ensuring that faculty, counselors, and students work together to enable these students to succeed.

Placement Testing

Placement testing should be mandatory for all new applicants who do not meet exemptions, such as a B average in high school English and math coursework or defined scores on SAT or ACT tests. McCabe (2003) stated that "Mandatory testing and placement is essential to the students' best interest and to maintaining a quality academic program" (p. 37). Seventy-one percent of community colleges in the United States require pre-enrollment placement testing. These tests are important because they identify students' abilities and facilitate their correct placement in classes. Without such tests, underprepared students face the same frustrations and barriers to success that they experienced in previous educational environments and are less likely to persist (Perez, 1998).

Course Prerequisites

Colleges should create a defined list of courses for which placement scores or successful completion of developmental coursework is a prerequisite. Prerequisites are important because, as McCabe (2003) states, "It does not benefit students to permit them to enroll in courses for which they are underprepared. This can only result in high rates of failure and dropout or the compromise of college standards to accommodate the underpreparedness of students" (p. 26). The institution should ensure that students have met the reading, writing, and math requirements before allowing them to take courses that require these skills. It is a disservice to students to allow them to take courses for which they are not prepared. Proper placement is essential to the success and retention of these students.

Advising and Counseling

David Crocket (1985) defines academic advising as the "developmental process which assists students in the clarification of their life/career goals and in the development of educational plans for the realization of these goals" (p. 248). Crockett also points out that proper advising from the beginning of a student's college experience through graduation is one of the single most important services an institution can provide to increase student retention. This is especially true with developmental students.

Crockett describes O'Banion's five-step advising model, which creates a logical sequence for advising: beginning with (1) exploring the student's

life goals, (2) exploring the student's career goals, (3) selecting a program of study, (4) selecting courses, and (5) scheduling courses (Crockett, 1985). It should be noted that this is an academic-advising model and that while developmental students need academic advising to help them identify goals and place them in courses to meet those goals, their needs extend beyond academic advising into personal counseling. McCabe (2003) supports this by saying that advisors should act as case managers to define and break down developmental students' barriers to success. This requires a special type of advisor trained not only in academic advising, but also someone familiar with personal counseling and the needs of developmental students. According to Meadows, Hensley and Tharp (1998),

> One of the most important support services for at-risk students is advising since this is where a personal, supportive relationship can help students identify the forces that are causing their academic difficulties and find the type of help that is tailored to the individual student's situation and circumstance. Very few students in academic trouble are there because of lack of ability. Academic advisors can help these students understand and overcome the causes of their academic failure. (p. 95)

Higbee, Dwinell, McAdams, GoldbergBelle, and Tardola (1991) suggest that, in working with developmental students, advisors should take the initiative to keep regular and ongoing contact with their advisees. They suggest an intrusive model, where advisors work with faculty to monitor students' progress and meet with students several times a semester, or more if needed, to ensure that they have someone to communicate with concerning their personal and academic difficulties.

Meadows, Hensley, and Tharp (1998) confirm this by describing the success that has been achieved by using such a model at Middle Tennessee State University (MTSU). MTSU encourages faculty to work with advisors and to rely on them for support with at-risk students. This provides the students with a contact person whom they know cares about their success and can help them. Because of an active advising program, retention rates for developmental students at MTSU are equivalent to retention rates for non-developmental students (Meadows, Hensley, & Tharp, 1998).

Early-Warning System
Meadows, Hensley, and Tharp (1998) extend contact among students, advisors, and faculty to include an organized early-warning system. This system stipulates that faculty should work closely with advisors of developmental students to warn them of attendance, academic, or personal problems early – before these problems become unmanageable. Having an

early-warning system managed by an advisor provides a strong system of communication and support because that advisor can compile information received from multiple faculty, as well as other students, to form a complete picture of a student's progress or difficulties. Perez (1998) cites a study at Irvine Valley College, where students who participated in an early-warning system had an end-of-the-year retention rate of 81.3 percent, a much higher rate than those who did not participate.

Orientation Course

A student-success or orientation course serves the purpose of familiarizing students with the college environment and providing them with basic study skills and academic-management techniques that will help them successfully to navigate their first experiences in college. Developmental students should be required to take an extended version of the course taken by all students. Higbee, Dwinell, McAdams, GoldbergBelle, and Tardola (1991) define a remedial program as one that provides only basic skill development, while a developmental program extends this to provide assistance with a student's intellectual and emotional development. A student-success course is a natural place to extend this development beyond the implementation of academic skills such as reading or math. This environment would serve as an appropriate setting to initiate a series of non-cognitive tests to evaluate the whole student and help students to understand their learning styles, personality characteristics, and aptitudes. The results could be used in cooperation with the student's advisor to facilitate individual advising plans. Tests such as LASSI (Learning and Study Skills Inventory), the Student Retention Inventory, the Dunn and Dunn Learning Style Model, or the Myers-Briggs Type Indicator could provide such information (McCabe, 2003).

For underprepared students, such a course could also help to socialize them in college practices that often are not understood by these students. The course could orient them to academic policies, communication skills, campus resources, relationship-building skills, stress-reduction skills, time- and financial-management skills, decision-making skills, and goal-setting skills. Since these students are not likely to take advantage of workshops and often do better in a structured environment, an extended student-success course provides an opportunity to introduce them to the personal and academic topics necessary to succeed in a college environment. However, it is essential that they begin this course during their first semester, as it provides them with a connection to the institution and the skills needed to persist through that first critical semester.

Learning Communities and Paired Classes

The concept of a learning community can be defined in many ways. Minkler (2002) defines a learning community as a way of "deliberately structur[ing] the curriculum so that students are more actively engaged in a sustained academic relationship with other students and faculty over a longer period of time than in traditional course settings" (p. 2). But, because each college structures learning communities differently, there is no absolute definition. However, learning communities tend to share the following characteristics as defined by Shapiro and Levine (1999):

- Faculty and students are organized into small groups.
- The curriculum is structured and integrated.
- Students establish academic and social-support networks.
- Students are given a setting to define the expectations of college life.
- Faculty collaborate in meaningful ways.
- Faculty and students work together on specific learning outcomes.
- Academic support services are provided.

The rationale behind these characteristics is supported by Tinto's Interactionalist Theory, which states that students who achieve greater social and academic integration are more likely to reach their goal of college graduation (Braxton, Hirschy, & McClendon, 2004). Brittenham, Cook, and Hall (2003) argue that failure to achieve social and academic integration contributes more to voluntary attrition than any other factor.

Social and academic integration can be achieved in a learning community through cooperative learning. Cooperative learning consists of students and faculty actively working together in a non-competitive environment to achieve shared learning goals. The group mentality serves to boost the confidence levels of the individual, thus increasing self-esteem and potential of academic success (Johnson, Johnson, & Smith, 1998). Cooperative learning moves away from the traditional lecture format and asks students to take a more active and responsible role in the learning process, "causing students to look forward to the class, to feel respected and needed in the pursuit of knowledge, and to respect and rely upon each other in these endeavors" (J. H. Gill, as cited in Minkler, 2002).

In addition to cooperative learning, learning communities often pair classes to provide an interdisciplinary approach. Pairing a developmental course with a content-based course can provide students with the opportunity to apply skills such as reading or writing that were learned in their developmental courses to their academic content. This makes the developmental coursework seem more relevant and gives them the satisfaction of making progress in a credit course toward their degree.

While learning communities and paired classes are not a direct function of student services, their organization requires cooperation between academic and student services.

Instructional Support Services

Colleges should also provide instructional support services through a variety of methods, including writing centers, math centers, professional tutors, and peer tutors. Tutoring services, whether offered through the writing center or through an assigned tutor, can be beneficial to the student's learning process when it supports and enhances the classroom instruction. Tutoring gives students the opportunity to ask questions that they might not have felt comfortable asking in class and to see the material presented in a different way. Having the same material presented in alternative ways supports students with different learning styles and shows them that different approaches and solutions to the same problem are acceptable (Brittenham, Cook, & Hall, 2003).

Tutoring also offers non-academic advantages. Tutoring has been shown to have a positive effect on underprepared students' confidence and attitudes toward their education. This is particularly true when a peer tutor (another student who has successfully completed the program) tutors the student (McCabe, 2003). Peer tutors serve as mentors and role models, inspiring confidence in underprepared students. As McCabe (2003) stated, "[U]sing a variety of tutoring methods is not simply a common component of remedial programs; it is a major factor in their success" (p. 63).

Bridging the Gap

As much as we would like to believe in the concept, "[t]here was never a golden age when all students came to college ready to do college work" (Stephens, 2001, p. 9). However, with 42 percent of students entering college underprepared and an estimation that 80 percent of future jobs will require the skills that a college education provides, we must find better methods to prepare these students and assist them in achieving their academic goals. While the fact remains that not all of these students have the ability to benefit and succeed in a college environment, a large number of them do have the ability and can persist and graduate – if our colleges provide them with the appropriate academic and personal interventions.

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