Baltimore City Community College at the Crossroads

It properly boasts many successes, but its ability to provide adequate access to a college education is diminishing. Problems and possibilities: a report to BCCC and the community.

“The mission of Baltimore City Community College is to educate and train a world-class workforce for Baltimore.”
— “Facts About The College,” BCCC Brochure

Baltimore City Community College (BCCC) is now in its sixth decade serving the people of Baltimore and Maryland. Located on two campuses in northwest Baltimore and at the Inner Harbor, plus five off-campus sites, the college had a Fall 2001 enrollment of 6,300 credit students and more than 12,000 non-credit students. The college has been the launching pad for thousands of students moving either directly into the working world or on to a four-year college. Topping its list of successes is BCCC’s nursing program, graduates of which achieve an almost perfect passing rate on professional exams every year — rates often exceeding those of other community colleges in Maryland and across the country. Among all BCCC career graduates, 97 percent are currently employed or continuing their education. Because 87 percent of them choose to work in Baltimore, the City is clearly the beneficiary of the community college’s efforts.

The number of graduates at BCCC, however, is far too low to fulfill its mission of providing Baltimore with a “world-class workforce.” There are clear signs that BCCC has reached a crossroads in its diminishing ability to provide adequate access to a college education. Until the Fall 2001 semester, for-credit enrollments had been decreasing in recent years; graduation rates have fallen significantly. Of 1,350 first-time students who entered BCCC in the fall of 1997, only 12 had graduated four years later.

At the same time, an increasing number of incoming BCCC students are not ready for college academics as defined by Maryland’s higher education officials. Although placement and academic decisions made by campus and state officials have exacerbated this situation, the fact is that a stunning 95 percent of BCCC’s first-time students will require remedial education before undertaking a full college-level curriculum. Indeed, the college’s most heavily subscribed academic offerings in English and mathematics are, by far, remedial courses in English, reading and mathematics. Not surprisingly, students who begin their college careers with large remedial needs tend to graduate at even lower rates than the rest of...
BCCC’s student body.

These phenomena are not unique to BCCC. Remediation is an issue for every Marylander, and indeed national, community college. Yet BCCC serves the state’s neediest students: the largest share of its entering student body comes from the Baltimore City Public School System (BCPSS). Nearly a third of the first-time students enrolling each fall proceed directly from BCPSS high school graduation. Data from college placement tests show consistently that BCPSS graduates are not prepared for college-level work. BCPSS officials must accept a large share of responsibility for BCCC’s remedial education problem and work collegially to address it.

Furthermore, with 56 percent of BCCC students working full-time and another 30 percent working part-time, most students require three to five years or more to earn a degree or complete a program.

As an “open enrollment” college which admits all holders of a high school diploma or a GED, BCCC has long dealt with educating students who are ill-prepared for college. This study finds, though, that the college has not adequately addressed the situation of hundreds of students for whom the BCCC experience begins and ends with a heavy dose of remediation, effectively narrowing the pipeline to graduation. BCCC must reinvent its approach to helping these students complete their basic education quickly and effectively.

Compared to other Maryland community colleges, fewer of its students are majoring in programs designed to help them transfer to a four-year institution. Rather, more BCCC students are earning Associate’s degrees in professional programs that lead directly to careers, and substantial numbers are enrolled in programs that lead to a career certificate and a job, not a college degree. This career preparation is a strength of the college. Research summarized in this report shows that students earning such degrees and certificates at BCCC often see their incomes increase substantially over those BCCC students who transfer to another two- or four-year school.

It is clear that BCCC cannot increase student retention and graduation rates without the substantive involvement and action of BCPSS, the Maryland State Department of Education and the Maryland Higher Education Commission (MHEC). The City of Baltimore, struggling with widespread economic and social problems, needs a steady stream of trained, well educated workers and has a vested interest in BCCC’s success in this mission. BCCC has shown it can and must play an even more crucial role in opening its doors and increasing college and career access for Baltimore’s workforce of the future.

### Table A. Four-Year Community College Graduation and Transfer Rates, 1996 Cohort

<table>
<thead>
<tr>
<th>Institution</th>
<th>Still Enrolled</th>
<th>Graduated</th>
<th>Transferred*</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCCC</td>
<td>11.9%</td>
<td>1.4%</td>
<td>11.9%</td>
</tr>
<tr>
<td>All MD State CCs</td>
<td>9.7%</td>
<td>8.2%</td>
<td>23.9%</td>
</tr>
</tbody>
</table>

* Transferred to a four-year institution either without graduating from BCCC or after obtaining a BCCC degree.

NOTE: Total graduation rate for BCCC Class of 1996 was slightly higher with the inclusion of students who transferred after graduation.

### Graduation Numbers Fall

Figures compiled by the Maryland Higher Education Commission (MHEC) show that BCCC holds an unwanted distinction among the State’s 16 community colleges: the lowest graduation rate, by far. Of the class of new students who entered BCCC in 1996, only 13.3 percent had graduated or transferred to a Bachelor’s degree-granting college four years later (Table A). Prince George’s Community College had the second lowest figures in this area; 28.8 percent of its 1996 entering cohort graduate or transfer within four years. Statewide, the community colleges saw, on average, one-third of their students graduate or transfer to a four-year school, according to MHEC. That means BCCC’s graduation rate is less than half of that for the state’s community colleges as a whole.

Looking at raw numbers, rather than percentages, is similarly discouraging. In 1996, BCCC awarded 432 degrees. Four years later, only 259 BCCC students earned degrees, a 40 percent decline in just four years. In that time, credit enrollment also declined at BCCC, but by only 2 percent, making that only a small factor.
The pipeline narrows further as BCCC students transfer to four-year colleges: of the 249 students who transferred in 1999, three-quarters chose Coppin State College, Morgan State University or the University of Baltimore. Historically, only one in three of these transfer students will graduate from these undergraduate institutions.¹

### Degrees versus Certificates

Most credit students at BCCC fall into one of two groups: those who hope to earn an Associate’s degree and transfer to a four-year institution, and those whose college careers will end with the attainment of either a career-oriented Associate’s degree or a certificate in a chosen vocation. (This does not include the large number of students attending non-credit, continuing education courses at BCCC.) BCCC has 39 career programs and eight transfer programs.

More than half of BCCC’s students work full-time, and almost two-thirds of those who work full-time have incomes of less than $20,000 a year. As a result, it may not be a surprise that a growing number of BCCC students are choosing career-oriented programs. Three times as many BCCC students are enrolled in career-based studies as are in transfer programs – a fact with important implications for strategic planning.

In the past five years, the number of Associate’s degrees awarded at Maryland community colleges has declined statewide by 15 percent. At BCCC, in that same time, the number of Associate’s degrees earned – both transfer and career — has decreased by 40 percent.

### Table D. Associate’s Degrees Awarded, 1996-2000

<table>
<thead>
<tr>
<th>Institution</th>
<th>Transfer Degrees Awarded</th>
<th>% change 1996-2000</th>
<th>Career Degrees Awarded</th>
<th>% change 1996-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
<td>97</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>BCCC</td>
<td>124</td>
<td>111</td>
<td>100</td>
<td>54</td>
</tr>
<tr>
<td>All MD State CCs</td>
<td>4,332</td>
<td>4,129</td>
<td>4,096</td>
<td>4,009</td>
</tr>
</tbody>
</table>

### Source: Maryland Association of Community Colleges, 2001 Databook


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In the drop in graduation numbers.

### Table B. Community College Enrollments by Focus

<table>
<thead>
<tr>
<th>Institution</th>
<th>Transfer</th>
<th>%</th>
<th>Career</th>
<th>%</th>
<th>Undeclared</th>
<th>%</th>
<th>Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCCC</td>
<td>1,263</td>
<td>22%</td>
<td>3,779</td>
<td>64%</td>
<td>841</td>
<td>14%</td>
<td>5,883</td>
</tr>
<tr>
<td>All MD State CCs</td>
<td>45,637</td>
<td>44%</td>
<td>35,220</td>
<td>34%</td>
<td>22,503</td>
<td>22%</td>
<td>103,360</td>
</tr>
</tbody>
</table>

### Source: Maryland Association of Community Colleges, 2001 Databook

In the past five years, the number of certificates awarded at BCCC and at other Maryland community colleges has remained stable.

### Table C. Certificates Conferred by Maryland Community Colleges, 1996-2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BCCC</td>
<td>79</td>
<td>83</td>
<td>73</td>
<td>85</td>
<td>84</td>
</tr>
<tr>
<td>All MD State CCs</td>
<td>1,495</td>
<td>1,412</td>
<td>1,707</td>
<td>1,421</td>
<td>1,472</td>
</tr>
</tbody>
</table>

### Source: Maryland Association of Community Colleges, 2001 Databook

At the same time, the number of Associate’s degrees awarded at Maryland community colleges has remained stable.

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Gauging the Value of a BCCC Degree or Certificate

An analysis by the Jacob France Center at the University of Baltimore provides hard data showing that earning a certificate or degree from BCCC has substantial value in the marketplace. The following chart regarding BCCC students graduating in the years 1989-2001 indicates an increase of $6,000 in the year following graduation and a doubled salary within seven years of graduation.

Table E. Value of Certificates and Associate’s Degrees at BCCC

The economic value of this education is reiterated when considering a specific cohort of 1995 BCCC graduates:

Table F. Average Annual Earnings for 1995 BCCC Graduates, 1994-2001

Value of specific career programs

BCCC students who opt to complete a two-year degree and head straight into the working world, rather than transfer to a four-year college, often reap significant financial benefits. In fact, those who complete Associate’s degrees and certificates at BCCC earn higher wages than those who transfer from BCCC. The study compiled wage data for BCCC graduates in a variety of disciplines who were employed year-round in the private sector (Table G). In some disciplines in particular, the financial benefits are impressive. For example, people who graduated from BCCC in 1995 in health-services fields – nursing, surgical technician, physical therapy assistant, health information technol-
ogy, respiratory therapy technology and emergency medical services – saw their incomes almost triple in six years. On average, those students were earning $14,413 before leaving college. By the year 2001, they were earning, on average, $40,168, the study found. For the small number of students who complete a Mechanical Engineering program (drafting technology, CADD, electronics technology, and construction technology), the reward is typically a salary over $40,000 within five years.

Similarly, students who graduated that year from BCCC’s business-technology programs (accounting, banking and finance, business, secretarial and office sciences, hospitality management and fashion design) saw their average incomes increase from $19,415 in 1995 to $30,949 in 2001.

The study also collected data on students who graduated in 1995 from BCCC with a degree in transfer programs. By 2001, those students were earning, on average, $29,985 – less than their counterparts with degrees in business technology or health services fields.

The above research shows that BCCC students who enter the work force after obtaining a two-year degree or a certificate often improve their earnings significantly. In some cases, the certificate has an economic value equal to the aligned degree. The data also show that students who transfer from BCCC to four-year institutions do not, in general, go on to earn more than their counterparts who go straight from BCCC into the working world.

Roughly three times as many BCCC students are enrolled in career-track programs as in transfer programs. The Jacob France Center data show that there may be sound financial reasons for students to follow career tracks, and may prove useful in a recommended evaluation of effective career certificate and degree programs at BCCC.

The Increasing Need for Remediation

Compounding the challenge presented by this changing focus is the increase in the number of incoming BCCC students (largely those educated in Baltimore City public schools) who are not deemed ready for college-level academic work and require remediation.

Currently, a high school diploma is not, by itself, evidence of readiness for college-level work in a community college setting. A 1996 report by MHEC delivered the dismal news: 60 percent of first-time students enrolled in Maryland community colleges directly from high school required remediation in math, English and/or reading.

At BCCC, the numbers are even

<table>
<thead>
<tr>
<th>Type of Degree</th>
<th>1993 Graduates</th>
<th>1994 Graduates</th>
<th>1995 Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Services AA</td>
<td>$35,000</td>
<td>$35,000</td>
<td>$35,000</td>
</tr>
<tr>
<td>Business Technology AA</td>
<td>$30,000</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Transfer Degree</td>
<td>$25,000</td>
<td>$25,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

Table G. Average Earnings for BCCC Graduates in Professional vs. Transfer Programs, 1993-1995 5 years following graduation

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starker. Virtually every new student who enrolled at BCCC last year needed remediation in at least one subject (Table H). Specifically, 95 percent of enrollees needed pre-college help in mathematics, three out of four needed help in English, and 70 percent in reading. A full 65 percent were deemed in need of remediation in all three areas. By comparison, in 1993, 84 percent of BCCC’s entering freshman class needed remediation in at least one subject.

In the Fall of 2000, a total of 2,264 students were taking remedial math, 1,394 were taking remedial English, and 1,229 were enrolled in remedial reading.

BCCC is not alone among Maryland colleges in accepting large numbers of students who need remedial assistance. More than one-quarter of the new Maryland high school graduates who took a college preparatory curriculum in high school (which includes three years of math) were required to take math remediation in Maryland public colleges. Of these “core curriculum” students at Maryland community colleges, 43 percent required remedial help in math, 29 percent in English and 27 percent in reading.²

As Table I shows, over half of the BCCC students needing remediation in Fall 2000 were placed in the two lowest levels of remediation classes in all three areas. In math, nearly four out of five students were in the lowest two levels. It should be stressed that the lowest-level remedial classes (designated at BCCC by the course number 80 in each of the three subjects) cover basic material such as arithmetic, basic reading skills and sentence construction, all skills normally taught before high school.

Students who are placed in the 80 level must pass three remedial courses (designated 80, 81 and 82 in the college catalog) before they can take a course for college credit in that discipline. This amounts to as many as nine non-credit courses, or 27 credits, that must be completed before the student can begin legitimate college English and math courses. In math, 1,023 students, nearly half, were assigned to the lowest level of remediation.

Do BCCC’s older, returning students need the most remediation? An analysis prepared for this report shows that a student’s age does not appear to be a major factor in his or her readiness for college-level work. The average age of students needing remediation in all three subject areas in Fall 2000, for example, was 26.1 years. The average age of students not needing any remediation was only slightly higher, 26.7 years.

Effectiveness of Remediation at BCCC

Remediation, sometimes called developmental instruction, has become a dominating part of BCCC’s instructional offerings, as it has at many community colleges around the state and country. The college offers three levels of remediation in English, reading and mathematics, and nearly all BCCC students take one or more. Before 1996, the college offered two levels of remediation in the three subject areas. That year, BCCC added a third, an acknowledgement of the wide disparity in academic preparedness of its incoming students and of the impact of a statewide agreement to increase expectations for college-level math.

In math alone, the college offered 113 sections of remedial instruction in the Fall 2001 semester, when it also offered 73 sections in remedial English and 61 in pre-college reading. By comparison,
BCCC offered only 26 sections in college-level math courses and only 68 in college English courses.

Students assigned to the lowest-level math course, Math 80, begin with functional arithmetic operations, including multiplication, division, fractions and decimals. The top-level remedial math course requires students to demonstrate Algebra skills, solving linear equations and absolute value equations.

Recent high school graduates come to BCCC having passed three years of high school math (including Algebra I, Geometry, and in many cases, Algebra II) as well as the state’s functional mathematics test, yet many still perform poorly on BCCC’s computerized placement tests and are assigned to remedial math courses.

**Remedial Outcomes**

The success rate for students in BCCC’s remedial courses has been discouraging. On average, only three out of 10 students will pass a remedial mathematics course. In English and reading, the averages are somewhat better, with pass rates reaching 50 to 60 percent (Table J).

It is not uncommon for BCCC students to fail a remedial class twice. (There are reports of students failing a class as many as six times.) Students must receive permission from a college vice president to take a class a third time, and faculty report that college officials are sometimes overwhelmed with the number of such requests that pour in at the beginning of each semester.

Not surprisingly, the more remedial courses a student takes, the less likely he or she is to graduate, according to figures prepared by the college. Among students enrolled in three remedial courses in Fall 1997, only 2.1 percent graduated four years later. Among students who took only one remedial course in the Fall 1997, 5.2 percent had graduated four years later.

The results are even more discouraging when the analysis considers a specific cohort of first-time students. Of the 1,350 first-time students who began college in Fall 1997, only 12 had graduated by the summer of 2001. Similarly, of the 1,575 students who began their college education at BCCC the following fall, only 14 had graduated three years later.

**Issues in Remediation**

**College Departmental Structure**

Some community colleges group their developmental education offerings and faculty within a distinct department. BCCC currently configures reading and English remediation within its English Department and math remediation within the Mathematics Department. While there are clearly advantages and disadvantages to both structures, the difficulty in communicating across rigid departmental lines sets up additional barriers for a remedial student already at risk.

**Placement Exams**

The defining moment for many of BCCC’s new students occurs when they take the college’s placement exam in math, reading and English. Since 1996, BCCC has used the Accuplacer test, a product developed by the Educational Testing Service (ETS). Six other Maryland community colleges also use Accuplacer; four others administer the Compass Entrance Examination, developed by ACT, Inc.

Accuplacer is a computerized, adaptive placement test that uses both multiple-choice and open-ended questions to assess a student’s abilities in reading comprehension, English, arithmetic, basic Algebra and college-level mathematics. In 1998 the academic deans from two- and four-year public colleges in Maryland agreed upon established cutoff scores for remediation (for example, that an incoming student must reach a Math score of 45 on a scale comparable to Accuplacer before beginning college-level math courses). Presumably, this was done to ensure that those students transferring from BCCC and other community colleges to the state’s four-year institutions would have an adequate background in college-level mathematics. As a result, BCCC stopped using its own placement test and adopted Accuplacer. Since that time, all public community colleges in Maryland have adopted either the Accuplacer or comparable Compass test.
dial students not use adaptive exams such as Accuplacer, which its studies found are targeted at students with “B” averages and above. The average “C” student will struggle with adaptive exams, ETS found.

Unlike a traditional written exam, the Accuplacer does not allow a student to revisit a question after answering it. Rather, as an adaptive test, the Accuplacer will offer three questions on a particular concept. If the student answers the first question incorrectly, the test will then pose an easier question on the same concept to try to gauge the student’s level of understanding. But for most of BCCC’s incoming students, used to taking pencil-and-paper tests, the inability to revisit their answers on the Accuplacer test is unfamiliar and could lead to lower scores.

There are also questions about the appropriateness of the mathematics concepts tested by Accuplacer. Dr. Jerome Dancis of the University of Maryland College Park, a mathematics professor who compared the Accuplacer test and Maryland’s public school math standards, found wide discrepancies between what is taught (and how it is taught) in Maryland high schools and what is tested at BCCC. The Accuplacer test, for example, stresses symbolic manipulation (e.g., solving equations), a skill not heavily emphasized in Maryland’s public schools. Much of the instruction in Maryland’s high schools involves “authentic problem solving” (e.g., word problems with application to real life scenarios), Accuplacer uses relatively few math word problems. Furthermore, some of the skills tested by the Accuplacer exam and required for a student to “test out of” remedial math are generally taught in high school pre-Calculus and Trigonometry courses, not in Algebra II. The state of Maryland requires

Students have complained to some departments at BCCC that they did not adequately understand the computerized instructions for the test. Officials at several other community colleges in Maryland said it is standard practice to give students extensive verbal instruction before the Accuplacer. BCCC should consider a more thorough verbal instruction session to familiarize students with the test. In addition, the State allows colleges to readminister the placement test once. At Anne Arundel Community College, for example, students can retake the Accuplacer provided they have not begun the related class. According to Lois Burton, director of instructional support at Anne Arundel, there are often significant improvements in students’ reading and English scores upon retesting.

Another area that demands more attention from BCCC involves the review courses offered before a student takes the placement test. These can provide a crucial chance for students to brush up on their skills before taking the Accuplacer test. For students returning to college after an extended hiatus, such a review would seem particularly important.

According to officials at other Maryland community colleges, a thorough review course can often help a student test out of at least one level of remediation. Anne Arundel Community College offers an eight-hour math review course for a $30 fee that typically advances the student to the next level of remedial course, or out of remedial courses altogether.

At BCCC, the two-hour review courses are neither required nor well attended. They are not scheduled in convenient blocks of time to allow students to attend all three sessions in a single day.

Responsibility for scheduling and advertising these courses should be placed in the hands of the centralized advising office, which is best suited to oversee the needs of incoming students. The college should consider expanding the review courses and making attendance mandatory, and encouraging students to retake the English and reading placement tests if they are unhappy with their scores.

An analysis by the Jacob France Center at the University of Baltimore provides hard data showing that earning a certificate or degree from BCCC has substantial value in the marketplace.

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3 Anne Arundel registrants are required to take a math review course, however, before they are permitted to retake the Mathematics Accuplacer test.
Math as a Gatekeeper

To earn a degree from BCCC, a student must pass a three-credit college-level mathematics course. This requirement applies to all students, whether or not their disciplines involve mathematics. Though the requirement seems rather modest, there is much evidence that mathematics has become a key obstacle for students seeking to graduate. Mathematics standards for graduation, agreed to with the best of intentions by academic officials around the state, are a factor in the dramatically reduced success rates at BCCC.

In 1996, the chief academic officers from Maryland colleges determined that all “general education mathematics” courses would require students to show mathematical abilities beyond what they termed “intermediate Algebra.” This determination is included as an appendix to the regulations covering transfers in the state’s Code of Maryland Regulations, and state higher education officials consider it a binding rule. Subsequently, a committee made up of mathematics faculty from both two- and four-year institutions worked to define introductory and intermediate Algebra as prerequisites. Today, the definition of “college-level” math remains unclear to many community college educators.

Before this decision was adopted, BCCC and other colleges had offered a general education mathematics course that taught intermediate Algebra for college credit. The 1996 decision gave BCCC little choice but to increase its mathematics requirement for graduation and to reclassify Intermediate Algebra as a remedial, non-college-level course. BCCC officials rightly feared that under the new rule, four-year institutions would stop giving transfer credit to BCCC graduates who took the Intermediate Algebra course for college credit. (Other Maryland community colleges agreed to make similar changes in determining what was college-level math, although Community College of Baltimore County at Dundalk waited to implement this practice until Fall 2001.)

With the 1996 decision, the state’s colleges set a new, higher standard for what constitutes college-level mathematics. Unfortunately, the state’s high schools did not take corresponding action to prepare their graduates for the tougher math content awaiting them at college. Many students in Baltimore City and elsewhere take and pass Algebra II in high school, but the subject matter they are learning is insufficient to allow them to test into college-level math once they reach BCCC or other state colleges.

This makes for a cruel day of reckoning for the state’s high school graduates, many of whom arrive at BCCC and are startled to find that their math skills do not equip them to handle the college-level math course needed to earn an Associate’s degree. Instead, they are placed in remedial courses that can dramatically slow their college progress.

Officials from BCCC, the BCPSS, and other academic officials from around the state must act quickly to bridge this mathematics learning gap, by increasing high school graduation requirements, revisiting the math requirement for the community college degree, or both. This gap affects all Maryland K-12 students, and the Maryland State Department of Education should investigate the relationship and the fit between its new high school requirements and Maryland’s college placement tests in mathematics.

Revisiting Mathematics Requirements

Mastering intermediate algebra, including Trigonometry and pre-Calculus, may be a worthy goal for some students. For many others, acquiring such skills will not affect their future education or career plans. For that reason, BCCC must press officials at other state colleges to re-examine the issue of what constitutes a meaningful college general education math requirement. Such a move should not be seen as an attempt to cheapen the value of a BCCC education. Rather, it would represent a realistic reappraisal of the college’s role in turning out qualified graduates prepared for the workforce. No one would argue that community college graduates should be mathematically illiterate. Yet having a solid knowledge of Algebra and Geometry, without moving on to linear equations and intricate Algebra, would suffice in a vast number of careers.

BCCC should examine its eight transfer and 39 career programs to determine what, if any, math prerequisites are necessary in each program. For example, is college-level math, as currently configured, truly a necessary requirement for a student earning an A.A.S. degree in word and information processing? To that end, BCCC officials should lobby to allow number of mathematics course options to satisfy the college-level course requirements in nontechnical fields. In particular, this new requirement would suffice for students who have no intention of transferring to a four-year college after obtaining a degree or certificate at BCCC.

60 percent of first-time students enrolled in Maryland community colleges directly from high school required remediation in math, English and/or reading.
BCCC might also re-examine its math prerequisites for individual degree and certificate completion. Even if some educators consider it heresy, it may be appropriate for some BCCC programs to have no math requirement at the college level. Many highly selective colleges throughout the nation do not require any college-level math for graduation.

Faculty
Responsibility for remedial education is shared by the English and Math departments. As a result, none of BCCC’s full-time faculty teaches a full load of remedial classes, in part because professors are unwilling to shoulder such a demanding, and often unstimulating course load. In the English Department, 17 of about 25 full-time faculty members teach remedial courses, usually one or two sections each. In the Math Department, every full-time faculty member teaches at least one remedial course. In some cases, full-time faculty members are paid extra money to teach more than the standard five-course load in a given semester.

It thus falls to part-time adjunct faculty to teach most remedial courses. The English Department had 60 adjunct faculty members in Fall 2001, with each generally teaching one or two classes a semester. In the Math Department, three-quarters of the remedial courses are taught by adjunct faculty.

In Fall 1999, adjunct faculty taught 78 percent of the remedial math sections, 48 percent of the remedial English sections, and 57 percent of the remedial reading sections. Unlike full-time faculty, adjunct professors have no obligation (nor are they paid) to hold office hours and be available to students outside of class time.

There are many reasons why BCCC struggles to find enough instructors to teach its remedial courses. Topping the list is the relatively low pay the school has traditionally offered, although the college is seeking to change this with its FY03 budget. It is also a struggle to staff classes offered in the morning hours, which are popular with many students, because many adjunct instructors also work full-time during the day.

The departments have established basic minimum standards for their adjunct faculty. In general, they require adjunct instructors to hold a Bachelor’s degree and to have completed a certain amount of coursework in the subject matter they teach. The departments have had to overlook those requirements in certain cases in the rush to hire instructors for all the needed remedial sections. Questions remain about the quality of instruction provided by some adjunct instructors. Students have complained, for example, about the poor English of some foreign-born instructors, particularly in the Math Department.

Because remedial education at the college level is still a fledgling field, ongoing professional development of faculty is critical. Yet, once remedial instructors are hired, BCCC does not require them to attend any type of professional development in instructing students with academic deficits. The English Department offers a voluntary, two-hour evening session for new adjunct faculty. The Math Department offers its own voluntary session during the day, and officials report that it is not well attended. The college should offer a more thorough, mandatory, paid orientation session, particularly for first-time instructors, as well as exemplary mentors available for adjuncts to consult throughout the semester.

Furthermore, BCCC has no rigorous program for evaluating instructors’ performance. With so many instructors, department heads are hard-pressed to do thorough evaluations of their performance, leaving it up to other faculty. In general, a full-time faculty member may sit in and observe one class of each adjunct instructor each semester. Administrators also rely on evaluations and/or complaints by students to signal a problem with an instructor.

Student Support
It is no secret to faculty and administrators at BCCC that many of their students must overcome overwhelming obstacles to be successful in college. Many hold full-time jobs; many have transportation problems or struggle to find affordable, quality day care for their children while they attend classes. More vexing concerns facing some students range from dysfunctional families to clinical depression.

It takes a well-motivated student to persevere in the face of such problems and continue in college. When students find themselves in remedial classes that seem to be only delaying their “real” college careers, their motivation can be sorely tested.

BCCC has tried to address the overwhelming social, emotional, academic and economic needs of its student body, particularly in its remedial education program. For example, the college now requires all students pursuing a degree or certificate to complete either a one- or three-credit course to improve their study, time-management and related skills.

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Some of these efforts have been piloted for a small group of students but not replicated; others have been implemented in an isolated manner that never impacts large-scale student support and advising. One exception is the Positive People Learning Community initiative, a student support program successfully piloted in Fall 1999 and recently expanded to include more than 100 students. BCCC officials have assessed these programs for results, but much more can be done to change student services practices campus-wide.

For example, BCCC students, as they enter and progress through school, do not receive formal counseling about their college paths or any outside difficulties they may be experiencing. Rather, the college assigns a faculty member to be each student’s academic adviser, which doesn’t work well, since full-time faculty members are hard-pressed to find time to offer advice and help to students. In theory, a student’s faculty adviser must approve his or her course selection before registration. In practice, according to BCCC officials, many students simply find any faculty member or administrator to sign off on their course selections, receiving little if any advice in the process.

Many BCCC students encounter their first adviser when they are failing courses and are referred to Student Support Services. The college reports that at any one time about 1,500 students, out of a total of about 6,000, are in academic difficulty. But with fewer than 10 counselors, BCCC struggles to provide meaningful assistance to students who need it.

Administrators and faculty report that students facing off-campus difficulties often respond with a knee-jerk conclusion that they must drop out of BCCC to cope. A safety-net support process with more trained counselors could well help such students find other alternatives or solutions to overcome such problems and stay in college.

**The Baltimore City Public School Feeder System**

No study of BCCC’s effectiveness can be complete without an examination of the college’s relationship with BCPSS.

In the fall of 1998, 34 percent of the college’s new students were recent BCPSS graduates. Many of the remaining two-thirds of that class had also attended BCPSS but had taken time off before entering college. Of the 1,565 students who graduated from Baltimore City Public School System (BCPSS) in the spring of 1998 and went on to college that fall, 606 (39 percent) enrolled at BCCC.

Recent findings at the state level bolster what would seem to be another common-sense observation: there is a correlation between how much remediation a student needs and the student’s performance in college. MHEC’s 1996 “Study of Remedial Education at Maryland Public Campuses” found that, at both community colleges and four-year institutions statewide, students who received remedial help trailed other students in grade-point averages and performance in their first English and math courses. The study also found four-year success rates, as measured by retention, graduation and transfer, were lower for community college students who needed more remediation.

Against the backdrop of these findings, it is especially discouraging to report the lack of academic preparation given to many of the students graduating from the BCPSS. After a decade of reforms and increased standards in Maryland, BCPSS graduates should be achieving at steadily higher levels at BCCC. Sadly, they are not. Roughly 95 percent of all Baltimore public high school graduates required remediation upon arrival at BCCC in the fall of 1998.

Looking at the numbers by high school is even more discouraging (see Table K). In Fall 2000, for example, of the 23 Frederick Douglass High School graduates entering BCCC, all required remedial instruction in math, and all but two tested into remedial English. Of the Douglass graduates, 20 (87 percent) required remedial reading help; of those 13 (57 percent) were placed in the lowest-level reading class.

Despite MSPAP reforms and increased high school graduation standards, BCCC is receiving graduates from Baltimore City public schools who are poorly prepared for college work, and the problem appears to be worsening. In the past four years alone, the percentage of BCPSS graduates requiring math remediation has risen from 88 percent to 95 percent. No community college can be expected to combat these deficiencies without corresponding responsibilities assumed and actions taken by BCPSS.

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*continued from page 10*

*continued on page 13*
Table K. Placement of BCPSS 2000 High Schools Graduates in BCCC Remedial Classes, Fall 2000

<table>
<thead>
<tr>
<th>Baltimore City High School</th>
<th># of Students Tested</th>
<th>English 80</th>
<th>English 81</th>
<th>English 82</th>
<th>Mathematics* 80</th>
<th>Mathematics* 81</th>
<th>Mathematics* 82</th>
<th>Reading 80</th>
<th>Reading 81</th>
<th>Reading 82</th>
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<td>26%</td>
<td>29%</td>
<td>32%</td>
<td>79%</td>
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<td>16%</td>
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<td>31%</td>
<td>3%</td>
<td>41%</td>
<td>28%</td>
<td>24%</td>
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<tr>
<td>Northern</td>
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<td>44%</td>
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<td>32%</td>
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<td>43%</td>
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<td>Wood</td>
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</tbody>
</table>

Source: BCCC, Institutional Research and Planning, 2001
Note: Not all students took all three placement tests.
Impact of Financial Aid Rules and Practices on Remedial Students

Nearly every student at BCCC receives some type of financial aid to help meet the costs of college, with federal Pell grants providing the bulk of the assistance. Pell grants, unlike federal loans, do not have to be repaid and are given to students who meet a financial need test.

In Fall 2000, 3,547 students — about 60 percent of the BCCC student body — received Pell grants. Under federal guidelines, a full-time student may receive up to $3,750 in Pell grants during the 2001-02 academic year to cover tuition, fees and books, as well as incidental costs for transportation, child care, or the purchase of a computer.

A typical full load of five courses at BCCC during the 2001-02 academic year costs $1,800 over two semesters. Remedial courses have the same tuition as college-level courses at BCCC, $60 per credit. After book costs, many students are eligible to receive the remaining amount of their Pell grants as payments issued by BCCC. Those checks are delivered in the second month of the semester. Over the eight semesters since the Fall 1997, the payments to students have averaged between $410 and $551 per semester, according to BCCC’s student accounting office. Those payments are primarily made from Pell grant proceeds, but include some funds through the federal Supplemental Educational Opportunity Grant and other sources of financial assistance.

Faculty and administrators in both the Mathematics and English departments report that a significant number of students stop attending classes around the time the financial aid payments are distributed to students each semester. BCCC should investigate this further.

Many students in Baltimore City and elsewhere take and pass Algebra II in high school, but the subject matter they are learning is insufficient to allow them to test into college-level math once they reach BCCC or other state colleges.

Newly enacted federal regulations require students under some circumstances to repay Pell grants if they drop out of classes before completing three-fifths of the semester. Because such funding returns to the state or federal government, there is little incentive for colleges such as BCCC to focus limited resources on this collection.

As noted elsewhere in this report, some BCCC students must take and pass as many as nine remedial courses before beginning their actual college-level study. It is not unusual for many students to have to repeat some of the remedial courses two or three times; a few return five or six times to the same course. Naturally, this extends the students’ need for financial assistance.

Under federal rules, a student with financial need may generally receive Pell grants while making progress toward an undergraduate degree. Pell grants will pay for students to take up to 150 percent of the courses necessary for a Bachelor’s degree. That is, if a Bachelor’s degree requires 120 credit hours, a student may receive Pell grants to pay for as many as 180 credits of instruction.

Congress has established limits on the number of Pell grants available to remedial students. In particular, a student may apply Pell grants to cover up to one year, or 30 credit hours of remedial classes. Students who are placed in the lowest level of remedial courses in all three subject areas — English, reading and math — will need to take nine remedial courses, for a total of 27 credit hours, before entering college-level courses. A student who fails and has to retake only one of those courses, a common occurrence, will use up his or her Pell grant eligibility for remedial instruction.

It is not clear how many BCCC students are exhausting their share of Pell grants or other scholarships before finishing remedial work, or before they complete a degree or certificate program at BCCC, and this in itself is a problem. If so, the college must examine other funding mechanisms for students who are making academic progress but struggling to find financial assistance.

Finally, federal rules prohibit the use of Pell grants to pay for remedial classes that cover pre-secondary academic material, in other words, class work normally covered in elementary or middle school. The U.S. Department of Education, which oversees Pell grants, does not generally scrutinize the curriculum offerings at colleges, as long as the college meets general eligibility guidelines for taking part in federal financial-aid programs. Discussions with faculty make clear that some of the work being covered in BCCC’s remedial classes is at a pre-secondary level, e.g., phonics and basic arithmetic. The college may be putting itself at risk with federal financial aid officials with such practices.

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Next Steps
This report makes the following recommendations:

Mission
• Looking ahead, carefully analyze graduation rates, enrollment, college credit earned and other more qualitative data regarding student experiences to evaluate the successful integration of its workforce mission consistently throughout the institution. Every area should be reconfigured to align with this mission, most importantly the traditional academic departments and student support. Continued work is needed to meet the challenge of bringing poorly prepared students up to and through college-level work.

• Encourage students to pursue certificate and career degrees that will translate into increased earning power immediately after graduation.

New Student Center/Developmental (Remedial) Division
• Reassess the decision to administer remedial education from within the Math and English departments. Create a new independent division for remedial education that includes placement testing, new student orientation and advisement, with staff specifically trained in developmental curriculum and instruction, and interactive with key academic and support functions within the college. This department could function as the one-stop center for all new BCCC students and would allow the college to better coordinate its course offerings, review sessions, lab hours and counseling, and to better evaluate its progress.

• Re-examine the need for three remedial courses in math, reading and English. Top-level remedial students may be able to accelerate their progress by combining 82 level courses with the appropriate entry-level college course.

Mathematics as a Gatekeeper
• Reassess its requirement for “college-level” math courses in all majors and programs. Math should no longer serve as a roadblock to students enrolled in non-math- or non-science-related programs.

• Working with state higher education officials, revisit the decision to define basic college-level math as content beyond intermediate Algebra. BCCC is not the only campus where this decision has had profound consequences. BCCC can lead the effort to reconsider the standard.

• The Maryland State Department of Education should consider requiring Algebra II for high school graduation. The highest-level courses required currently are Algebra I and Geometry.

Placement Testing
• Re-assess its use of Accuplacer exams and consider other placement techniques. Furthermore, students should have the option to take the placement test with paper and pencil. Such tests are more familiar to incoming students and may give a fairer picture of a student’s abilities. During that assessment, the college should examine whether an adaptive exam like Accuplacer is best suited to the incoming students’ abilities.

• Coordinate review courses for the English, reading and mathematics placement exams to make it easier for students to attend.

• Permit students to retake the Accuplacer English and reading test once, and (after a mathematics review session) to retake the Accuplacer mathematics test.

• Study the feasibility of making such review courses mandatory for all students taking the placement exams. As an alternative, the college should explore offering incentives (e.g., book discounts) to students who take the sessions.

• Re-examine cutoff scores for remedial math courses to ensure that students are being placed in the right course offerings. According to the college, a student scoring 61 on the Accuplacer placement exam would be required to take one remedial course at the Community College of Baltimore County. The same score would require two remedial courses at BCCC.
Student Support

- With retention as its highest priority, consider adopting an explicit college-wide focus on providing support for its students based on its past successes. BCCC should carefully analyze the results of the Positive Peoples Learning Community and Summer Academic Institute (SAI) initiatives to determine what components should be expanded. Both follow models that have worked well on other campuses and require additional funding for personnel.

- Begin a “one-stop” advising process that bundles academic, social and financial services and begins before placement testing to help every entering student make thoughtful decisions about college and career and to be a resource throughout the college experience. Student Support should be viewed not only as a department but also as a foundation of the BCCC culture, with ties to every department in order to better serve every student in completing a degree or certificate.

Faculty

- Explore the feasibility of hiring full-time faculty with expertise in remedial instruction.

- Continue to recommend increased pay for adjunct instructors to make it comparable to or greater than those at peer institutions. BCCC should also explore the need for increased salaries for mathematics lab tutors.

- Expand professional development for newly hired adjunct faculty, with an emphasis on remedial instruction. The college should make such sessions mandatory, pay adjunct faculty to attend, and provide classroom mentoring.

- Improve the evaluation process for all faculty members, particularly adjunct instructors.

- Redouble its efforts to recruit qualified remedial instructors, tapping into the pool of retired public-school teachers in the Baltimore region.

Financial Aid

- Determine the relationship between effective student financial aid management and BCCC program completion. BCCC should seek to quantify the impact of students’ financial difficulties on their decisions to “stop out” or drop out of college. It is critical to collect and analyze data about individual student use and possible misuse (e.g., students dropping classes after getting their Pell grant checks) of financial aid and scholarships.

- Insure that all students know about and take advantage of all federal, state and local financial aid and scholarship offerings, and understanding the limitations of such programs.

Bridging the College Readiness Gap

- Most importantly, reinvent the partnership with Baltimore City Public School System to produce successful articulation from city schools to and through BCCC.

- Re-evaluate the use of $460,000 allocated for programming with the Baltimore City public high schools for programs with a more direct impact on student readiness for college than supplementing reading instruction credits for BCPSS teachers – a strategy duplicated at other local colleges. Expand the PASS Program pilot that allows high school students to take the Accuplacer and required remedial courses while still in high school.

BCCC must reinvent the partnership with Baltimore City Public School System to produce successful articulation from city schools to and through BCCC.

Further reading on the topic continues on page 16.
• Improve its articulation with the BCPSS curriculum as part of its ongoing effort to reduce the need for remediation. One goal of both institutions should be that high school assessment tests and college-level placement tests cover equivalent material.

• Consider having BCPSS mathematics and English teachers take the Accuplacer exam to familiarize them with the threshold requirements at BCCC.

• Report each year to BCPSS on the remedial instruction needed by its recent high school graduates, with data broken down by high school.

• Along with BCPSS and state officials, carefully evaluate the results of the PASS program to see if it is an effective and cost-efficient method of preparing students for college. The classes should be taught five days a week on high school campuses to ensure attendance and continuity of learning. The program should be geared toward 10th and 11th graders who are not progressing sufficiently, giving the high schools time to help their students “catch up.”

Data Collection

• Expand its data collection and analysis capabilities in the areas of remedial instruction and degree/certificate program workforce outcomes to help administrators better serve the needs of students.

• Begin collecting better data about demographics, high school academic performance and other aspects of a student’s background. This could be accomplished, at least in part, by using the questionnaire available as part of the Accuplacer placement test, at no cost to the college.

• Place special emphasis on gathering and evaluating qualitative information about the experiences of incoming students for use in redesigning student support services and remedial education.

• Faculty should be given a way to submit grades, including progress reports throughout the semester, by computer. Counselors could monitor these grades more effectively and step in to help struggling students.

Choosing The Right Path

As BCCC continues to wrestle with retaining students through remedial education to program and degree completion, much will rest with the leadership of its next president. Nevertheless, paving the way to workplace success at BCCC depends greatly on the combined efforts of the Baltimore City Public School System (BCPSS), the Maryland State Board of Education, and the Maryland Higher Education Commission (MHEC). Much of Baltimore’s future economic health turns on a successful K-16 collaboration among these partners to produce qualified City residents for available City careers.

The full text of “Baltimore City Community College at the Crossroads” is available on The Abell Foundation’s website at www.abell.org or Write to: The Abell Foundation, 111 S. Calvert Street, 23rd Floor, Baltimore, MD 21202

ACORN negotiates comprehensive Community Reinvestment Act agreements with major area lenders, including AmericaQuest Mortgage Company and Bank of America Mortgage; mounts challenges of bank mergers thought to be against the best interests of low-income borrowers; develops loan instruments that can best serve low- to moderate-income families; assists buyers by identifying potential properties; helps families with budgeting; provides information on predatory lending and how to avoid it; and assists consumers in making complaints to state, local and federal agencies to help enforce anti-predatory lending laws.

Numbers tell the ACORN story best. In the past three years the program has helped close 1,738 loans to low- to moderate-income borrowers in Baltimore City with a delinquency rate of only 2.3 percent. Counseling has been provided for over 300 victims of predatory lending practices, and 4,000 families have been counseled on budgeting and bill paying.

The Abell Foundation salutes ACORN for its continuing efforts in helping low- to moderate-income families become homeowners, and commensurately, improving the quality of life in Baltimore, house by house.