



Massachusetts Board of Higher Education

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*Final Report from the*  
**Task Force on Retention  
and Completion Rates at  
the Community Colleges**

**February 2007**

**Task Force on Retention and Completion Rates at the Community Colleges**  
**Final Report**

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## **EXECUTIVE SUMMARY**

There has been a great deal of attention paid to the graduation rate of community college students here in the Commonwealth and across the country. According to the national IPEDS<sup>1</sup> measure, the average community college graduation rate for first-time, full-time, degree-seeking students in Massachusetts was 17.4 percent in 2005, as compared to the national average of 21.5 percent for the same year. In December 2005, the Board of Higher Education established a Task Force on Retention and Completion Rates at the Community Colleges in order to better understand this issue, as well as the limitations of existing measures, in order to ultimately increase the success and educational goal attainment for all community college students.

The future success of the Massachusetts economy depends upon a more educated workforce, with a high premium placed on earning at least an associate degree to live and work in the Commonwealth. By 2012, the number of jobs requiring an associate degree or higher will grow from 33 percent to 56 percent. Demographic changes in the Commonwealth also point toward growth in minority and first-generation college students, many of whom will be served primarily by the community colleges. The economic health of the Commonwealth is in jeopardy without a more focused effort to increase the number of residents who earn at least an associate degree.

Massachusetts' 15 community colleges play a crucial role in the preparation of the Commonwealth's workforce and enroll more than half of all undergraduates in the state's public higher education system. Community colleges provide students with a liberal arts education and appropriate preparation for transfer to four-year institutions, as well as certificates and associate degrees in many high-need fields. In addition, community colleges provide workforce training for many residents who are not seeking a degree.

By virtue of their open admissions policy and unique mission, community colleges educate students from diverse economic, educational, and demographic backgrounds who might not otherwise have access to higher education. Many of these students, including low-income students, academically under-prepared students, and working adult students who attend part-time, must overcome significant barriers in order to achieve their educational aspirations.

The Task Force developed the following goals and accompanying recommendations to address both the first-time, full-time, degree-seeking student cohort as defined by the national IPEDS measure, and the majority of community college students who do not meet these criteria. The IPEDS cohort constitutes, on average, one third of all new community college students in Massachusetts. The goals and recommendations presented here focus equally on increasing graduation rates for first-time, full-time, degree-seeking students and increasing the success rate of all other students who attend the Commonwealth's community colleges. Further, an additional goal calls for leveraging available resources and advocating for increased funding.

Because of the limitations of the IPEDS graduation rate in assessing student success, more accurate ways of defining and measuring success for all students are needed, including but not

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<sup>1</sup> The national standards are established through The Integrated Postsecondary Education Data System (IPEDS) which define the graduation rate as the cohort of first-time, full-time, degree-seeking, new freshmen utilizing 150 percent of the traditional completion time to complete a degree program at the initial institution in which they enrolled.

limited to first-time, full-time students seeking a degree. This will require careful consideration of the many ways community colleges serve their students. For a more complete and true understanding of student success, the parameters need to include—but also go beyond—the IPEDS graduation rate.

Over a 12-month period, the Task Force heard presentations from leading national scholars and local experts, out-of-state community college leaders, and Massachusetts community college students. The Task Force also reviewed research literature, examined national and statewide data, and conducted a statewide community college survey.

The following are the key findings of this research:

- More than 60 percent of first-time, full-time, degree-seeking students enrolling in community colleges are not college ready and require developmental coursework. These students have lower graduation rates than college ready students.
- Early completion of developmental coursework is essential for successful retention and graduation.
- There are significant achievement gaps among groups of students based on income level, ethnicity, and gender.
- The three-year graduation rate for first-time, full-time, degree-seeking students who complete a degree at the initial institution in which they enrolled (IPEDS) is one important measure of student success. Exclusive use of this measure obscures the unique mission of community colleges and does not include two thirds of Massachusetts community college students.
- The Massachusetts community college student retention rate is comparable to the national average.
- There is incomplete data on and assessment of the effectiveness of existing programs and services available to help students succeed.

The Task Force has developed three goals and subsequent recommendations:

***Improve student success*** by increasing the graduation rate for first-time, full-time, degree-seeking students who complete within 150 percent of time (IPEDS) to exceed peer, regional, and national averages within seven years; and increasing educational goal attainment for the majority of community college students who are not included in the traditional graduation rate (IPEDS) measure

- Expand support programs for community college students.
- Increase college readiness of high school students.
- Increase full-time faculty and provide professional development.
- Elevate public awareness about the benefits of earning a community college degree or certificate.

***Develop comprehensive student success measures*** for all community college students, including the two thirds who are not included in the traditional graduation rate (IPEDS) measure

- Develop campus-wide, long-term strategies to foster data-driven improvements by incorporating additional measures of student success.
- Use data to inform decisions and implement change at the campus and statewide levels.

***Leverage financial resources*** to implement task force recommendations

- Secure annual appropriations based on the Board of Higher Education and campus-approved funding formula in order to close the current funding gap that exists at the community colleges.
- Ensure continued and increased support for MASSGrant, the Commonwealth's primary need-based financial aid program.
- Secure \$2 million in funding for dual enrollment programs.
- Involve government and civic leaders in securing financial support from the business community and other private sector interests.
- Develop incentive-based financial aid programs targeting college-ready, first-time, full-time, degree-seeking students as well as at-risk students, including those enrolled in developmental courses or those who are enrolled part-time.

The Task Force recognizes that community colleges have long grappled with the barriers associated with the educational success of their students. All of the Massachusetts community colleges offer a multitude of programs and initiatives designed to support student success, which signifies a persistent interest in and commitment to these issues. Despite such efforts, the Task Force believes that the Commonwealth and its community colleges can do a better job of helping students meet their educational goals, including raising the percentage of students who graduate, and calls on the Board of Higher Education to implement these recommendations.

## **I. INTRODUCTION**

There has been a great deal of attention paid to the graduation rate of community college students here in the Commonwealth and across the country. According to the national IPEDS<sup>2</sup> measure, the average community college graduation rate for first-time, full-time, degree-seeking students in Massachusetts was 17.4 percent in 2005, as compared to the national average of 21.5 percent for the same year.<sup>3</sup>

In order to proactively address this issue, the Massachusetts Board of Higher Education in December 2005 established The Task Force on Retention and Completion Rates at the Community Colleges. The group was asked to develop an understanding of the issues that impact certificate and degree completion for students at the community colleges, and make recommendations to the Board of Higher Education on steps that can be implemented to support students enrolled at Massachusetts public two-year colleges to graduate in a timely manner or successfully transfer to a four-year institution. (See Appendix A for full charge.)

The Task Force included representatives from several community colleges, Massachusetts government agencies, and various organizations and industries committed to the success of community college students. (See Appendix B for full list of members.)

Over a 12-month period, the Task Force heard presentations from leading national scholars and local experts, out-of-state community college leaders, and Massachusetts community college students. Members also reviewed research literature, examined national and statewide data, and conducted a statewide community college survey.

The Task Force also took into consideration recent Board of Higher Education task force reports on Student Financial Aid (October 2006) and Graduation Rates at the State Colleges (June 2005). Following the information-gathering phase of this process, members assembled key findings for Massachusetts, crafted goals and recommendations, and developed a timetable with potential implementation strategies.

The resulting report examines the issue of community college graduation rates in Massachusetts in detail, including a critical look at the national IPEDS measure and clarifies how to better measure student success in Massachusetts for ALL students—not just the small group of students that is captured by the IPEDS measure. The report also recommends looking beyond traditional graduation rates in order to gain a complete picture of community college students' success, and use data to implement change at both the institutional and statewide level.

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<sup>2</sup> The national standards are established through The Integrated Postsecondary Education Data System (IPEDS) which define the graduation rate as the cohort of first-time, full-time, degree-seeking, new freshmen utilizing 150 percent of the traditional completion time to complete a degree program at the initial institution in which they enrolled.

<sup>3</sup> The national public community college average graduation rate represents all public, associate colleges in the United States who submitted graduation rate survey data to the Integrated Postsecondary Education Data System (IPEDS).

## II. BACKGROUND

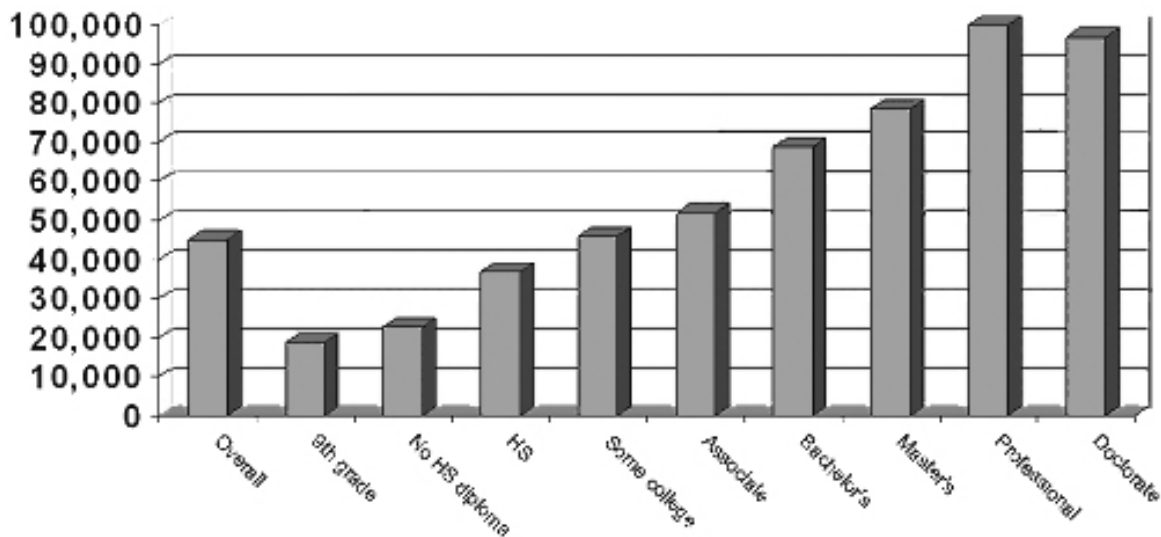
### *The importance of community college degrees*

The future success of the Massachusetts economy depends upon a more educated workforce, with a high premium placed on earning at least an associate degree to live and work in the Commonwealth. According to the Massachusetts Department of Workforce Development, nearly one third of all current jobs in Massachusetts require an associate degree or higher. By 2012, this number is expected to grow to 56 percent as the economy expands by an estimated 7.8 percent and adds 265,780 new jobs.<sup>4</sup> To underscore this situation, the 2005 Report of the Senate Task Force on Public Higher Education, along with numerous other reports, warned that the future economic success of the Commonwealth is in jeopardy if we do not increase the skills and credentials of our workforce and make a renewed commitment to investing in public higher education.

Massachusetts' 15 community colleges play a crucial role in the preparation of the Commonwealth's workforce, and enroll 115,000 students annually—more than half of all undergraduates in the state's public higher education system.<sup>5</sup> In addition, community colleges provide students with a liberal arts education and appropriate preparation for transfer to four-year institutions. This critical role is underscored by the fact that statewide policy incentives, including guaranteed admission to four-year public institutions and reduced tuition rates, encourage community college students to complete their associate degree before transferring.

Nationally, the table below provides a persuasive look at how higher-level degrees translate into increased earnings.

*Table 1. Median Household Income and Educational Attainment*



<sup>4</sup> Massachusetts Department of Workforce Development. (2006). *Massachusetts Employment Projections through 2014*. Boston, MA: Massachusetts Department of Workforce Development.

<sup>5</sup> In fall 2005, the community colleges enrolled 50.1 percent of undergraduates, the University of Massachusetts enrolled 27.5 percent, and the state colleges enrolled 22.5 percent.



Source: US Census Bureau, 2004.

Note: Data applies to households with a householder over the age of twenty-five.

A recent report<sup>6</sup> notes that nine out of ten community college students live and work in Massachusetts after graduation, contributing to the overall economy and the tax base of the Commonwealth. Over the course of a student's working life, the increase in earnings attributable to a community college education is \$330,000. In addition to the personal financial benefits of earning a degree, the Commonwealth can expect to collect \$25.2 million in additional tax revenues over the 30-year working life of the students educated in FY 2001 at community colleges.

### ***The traditional national graduation rate measure: IPEDS***

Graduation rates collected and reported by the national Integrated Postsecondary Education Data System (IPEDS) have been the traditional measure of success of community college students. This measure begins with an entering fall cohort of first-time, full-time, degree-seeking students. It tracks whether or not these students complete a degree or certificate within 150 percent of "normal time to completion" at the same institution at which they initially enrolled. (For a two year associate degree, three years would be within 150 percent of normal time.)

Although there are individual and public benefits associated with earning an associate degree, the average Massachusetts community college 2005 graduation rate of 17.4% falls below the national IPEDS average of 21.5 percent.<sup>7</sup> While the Massachusetts number is of concern and needs to be improved, the IPEDS measure captures only one third of new students at the community colleges and less than 15 percent of all students. The majority of new community college students are not captured in the IPEDS measure, therefore painting an incomplete and limited picture of student success in Massachusetts.

Further, by limiting the time to complete a degree to "150 percent of normal time" at the same institution, the IPEDS measure does not include students who take more time to graduate because they change to part-time status or have had to take time to complete developmental or English-as-a-Second-Language classes, credits that are not included toward a degree. Students who transfer to another institution before earning a degree or certificate are also excluded. Thus, these students lower the IPEDS graduation rate although they may have accomplished their educational goals.

To examine one of these areas in greater depth, many students enter community colleges with the goal of transferring to a four-year institution. In fall 2005, a total of 2,394 Massachusetts community college students transferred to one of the public state colleges or University of Massachusetts campuses (1,715 and 679 respectively). Of this total, nearly half transferred before earning an associate degree. However, these students are not counted in the IPEDS graduation measure resulting in perceived lower rates of student success although these students may have successfully continued on to complete their baccalaureate degrees. This example

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<sup>6</sup> Massachusetts Community Colleges Executive Office. *Massachusetts community colleges, A smart investment*. (n.d.). Boston, MA: Massachusetts Community Colleges, Retrieved November 15, 2006, from <http://www.masscc.org/pdfs/economicimpactreport.pdf>.

<sup>7</sup> The Massachusetts Community Colleges IPEDS graduation rate reported in 2003 was 16.7 percent compared to the national average of 23.3 percent and in 2004 was 16.6 percent compared to the national average of 22.4 percent.

underscores the importance of recognizing, examining, and supporting the educational attainment of the majority of students who are excluded by the IPEDS measure.

***Beyond graduation rates: Measuring success for all students***

A growing number of researchers, policy makers, and institutional leaders are addressing the question of how to more accurately define student success at community colleges given students' diverse educational goals. While these include earning an associate degree or certificate, they also include taking preparatory courses in order to transfer to a four-year institution, taking developmental or English-as-a-Second-Language (ESL) courses, job training and enhancement, and personal enrichment. The development of appropriate standards for defining and measuring student success for all students, including but not limited to first-time, full-time students seeking a degree, will require careful consideration of the many ways community colleges serve their students. For a more complete and true understanding of student success, the parameters need to include—but also go beyond—graduation rates to include measures such as rates of degree or certificate completion, transfer to another institution, or enrollment over the course of four, five, and six years.

Other states are in the early phases in developing models of how to expand the understanding of student success, including national multi-state initiatives such as “Achieving the Dream” and “Bridges to Opportunity;” and national assessment programs such as the Community College Survey of Student Engagement and the Foundations of Excellence® in the First College Year program. Academic research centers such as the Community College Research Center at Columbia University and the Center for Urban Education at the University of Southern California as well as national conferences such as the NPEC 2006 National Symposium on Postsecondary Student Success all call for a more comprehensive understanding of student success. These efforts have resulted in new and expanded ways of looking at student success beyond the traditional graduation rate, including the following areas:

- ***Student Progress:*** How many first-time students have completed a degree, transferred, or are still enrolled at an institution of higher education after three, four, five, six or more years?
- ***Student Goal Attainment:*** What percentage of students meet the educational goals stated on their application and advising records? How should we interpret students who cite degree attainment as a goal simply in order to receive financial aid?
- ***Course Retention and Success:*** How quickly do students complete their courses?
- ***Term-to-Term and Fall-to-Fall Retention:*** At what rate do students return term-to-term and year-to-year? How many students persist every semester until degree completion? How do the numbers differ for part-time and full-time students?
- ***Part-time and Full-time:*** What percentage of students who begin as full-time students change to part-time students? How many students who “drop out” or “stop out” return to an institution of higher education?

- ***Time-to-Degree:*** How many semesters elapsed prior to degree attainment? What percentage of full-time students attempt and complete 12 credit hours per term?
- ***Developmental Coursework:*** What percentage of students complete their developmental coursework in the first semester or first year? What is the time-to-degree after completing developmental coursework?
- ***Transfer Rate and Success:*** What percentage of students complete their goal of transferring to a four-year institution? How do the four-year graduation rates of transfer students compare to students who started at the four-year institution?

These are but a few examples of questions being posed by other states and in other regions of the country. The resultant data will guide improvement in institutional practices and help students reach their educational goals. (See Appendix C for comprehensive information on and rationales behind student success measures pertaining to the Massachusetts community colleges.)

### ***Barriers to student success***

There are multiple reasons why some students persist in their educational goals while others leave higher education prematurely. Students bring to campus their own educational experiences; personal goals; study habits; motivations; and interests that may help or hinder academic progress. A recent study on the completion of baccalaureate degrees found that two thirds of the variation in degree completion rates among institutions was attributed to differences in entering classes rather than differences in the effectiveness of undergraduate retention programs.<sup>8</sup>

By virtue of their unique mission as compared to traditional four-year institutions, community colleges educate students from diverse economic, educational, and demographic backgrounds who might not otherwise have access to higher education. Many of these students, including low-income students, academically under-prepared students, and working adult students who attend part-time, must overcome significant barriers in order to achieve their educational goals.

National research reveals that *low-income students* leave college without a degree at higher rates than their wealthier peers,<sup>9</sup> often because they must balance competing demands of work and school. In fact, 81 percent of community college students work an average of 30 hours per week.<sup>10</sup> A recent Education Trust Report found fewer than nine percent of students from low-income families earn a bachelor's degree by age 24. Research shows that low-income community college students are significantly more likely than high-income students to have unknown educational expectations or to have a certificate as their highest expected credential. By comparison, high-income students are far more likely to pursue transfer to a four-year college or

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<sup>8</sup> Astin, A.W. & Oseguera, L. (2005). *Degree attainment rates at American colleges & universities*. Los Angeles: UCLA, Higher Education Research Institute.

<sup>9</sup> Muraskin, L. & Lee, J. (2004). *Raising the graduation rates of low-income college students*. Washington, D.C.: The Pell Institute for the Study of Opportunity in Higher Education.

<sup>10</sup> American Council on Education (August 2003). *Student success: Understanding graduation and persistence rates*. Retrieved September 15, 2006 from <http://www.acenet.edu/programs/policy>.

university.<sup>11</sup> There continues to be a strong relationship between socioeconomic status and the probability of degree completion.

In Massachusetts, community colleges cited *financial pressure* as the most common reason students gave for leaving community college prior to completing a degree<sup>12</sup>. This result reflects the concern raised in the 2006 Board of Higher Education's Financial Aid Task Force Report that the median MASSGrant award (the Commonwealth's primary need-based financial aid program) to community college students was \$1,150 (FY05). This amount is *less than one third* the annual cost of tuition and fees at community colleges. There are many additional costs, including books and supplies, transportation, housing, food, clothing and other living expenses—all of which community college students must pay in addition to tuition and fees.

*Academic preparation* is another significant factor which influences whether or not students succeed in college. Many students graduate from high school unprepared for college-level courses. These students, as well as those who have been out of school for a number of years, must enroll in developmental courses upon entering community college. Such courses do not count toward a degree, resulting in additional costs of time and money to the student, as well as to the community college. Moreover, students enrolled in developmental courses tend to have lower graduation rates. Nationally, 70 percent of students who took at least one developmental reading course in college did not obtain a degree or certificate within eight years of enrollment.<sup>13</sup>

There remain significant *gaps in educational outcomes* among students representing various *races and ethnicities*. Nationally, Latinos and African Americans at community colleges have lower rates of earning a degree or transferring to a four-year institution than the overall population.<sup>14</sup> This is a particularly important point for the Commonwealth given demographic projections which predict an increased percentage of minorities in the working-age population through 2020 and beyond.<sup>15</sup> This research suggests that the current achievement gap between whites and minorities will result in a decreased percentage of young people holding college degrees, and therefore a decreased number of people able to live and work in the Commonwealth and contribute to the Massachusetts economy.

Massachusetts community colleges serve a greater proportion of low-income, academically under-prepared, minority, and part-time students than the state colleges and University of Massachusetts campuses, as demonstrated in Table 2.

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<sup>11</sup> Bailey, J., Calcagno, J.C., Jenkins, D., Kienzl, G. & Leinbach, T. (2005) *Community college student success: What institutional characteristics make a difference?* (CCRC Working Paper No. 3). New York, NY: Community College Research Center, Teachers College, Columbia University.

<sup>12</sup> Task Force on Retention and Completion Rates in Community Colleges Survey (2006, Spring). (Survey Data). Boston, MA: Massachusetts Board of Higher Education.

<sup>13</sup> Adelman, A. (2004). *Principal indicators of student academic histories in postsecondary education, 1972-2000*. Washington, DC: U.S. Department of Education, Institute of Education Sciences.

<sup>14</sup> Bailey, T. (2006, May 24). *National Research on Community College Graduation Rates and Students Goal*. Poster session presented to the Task Force on Retention and Completion Rates at the Community Colleges, Boston, MA.

<sup>15</sup> Coelen, S. & Berger, J. (2006). *New England 2020: A forecast of educational attainment and its implications for the workforce of New England states*. Quincy, MA: Nellie Mae Education Foundation.

Table 2. Populations Served by Public Higher Education in Massachusetts

Indicator	State Colleges	University of Massachusetts	All Community Colleges	Urban Community Colleges
<b><u>Income</u></b> Percentage of students with an expected family contribution <sup>a</sup> of < or = \$3,850 and who applied for financial aid (Fall 2004)	36.8%	42.3%	<b>74.4%</b>	<b>78.8%</b>
<b><u>Academic Preparation</u></b> Percentage of Full-Time, First-Time Degree-Seeking Students Who Enroll in a Developmental Course (Fall 2005)	21.6%	8.0%	<b>61.3%</b>	<b>69.6%</b>
<b><u>Part-Time Status</u></b> Percentage of Degree-Seeking Undergraduate Students Who Enroll Part-time (Fall 2005)	14.6%	12.9%	<b>51.8%</b>	<b>53.5%</b>
<b><u>Race/Ethnicity</u></b> Percentage of Degree-Seeking Undergraduate Students that are Minority (Fall 2005)	11.3%	21.3%	<b>27.8%</b>	<b>46.8%</b>

<sup>a</sup> Expected family contribution (EFC) is considered a proxy of a family's ability to pay for college, over and above all forms of financial aid. An EFC of \$3,850 generally correlates to a family income of \$40,000 and is one of the criteria for Pell Grant eligibility.

*Additional risk factors* which may threaten student persistence and graduation include attending college part-time; not entering college directly after high school; being a single parent; being financially independent (i.e., students who rely on their own income or savings and whose parents are not sources of income for meeting college costs); caring for children at home; working more than 30 hours per week; and being a first-generation college student.<sup>16</sup> Most community colleges students demonstrate one or more of these risk factors.

### ***Promoting student success***

National research confirms there are a number of institutional conditions and practices positively associated with student success. These include:<sup>17</sup>

- setting high expectations of students (in curriculum, climate, and teaching practices);
- coherence in the curriculum (i.e. required courses and sequencing of courses);
- integration of experiences, knowledge, and skills;
- opportunities for frequent feedback;
- collaborative learning opportunities;
- respect for diversity (race/ethnicity/cultures, talents and abilities, ways of knowing and learning);
- frequent contact with faculty;
- emphasis on the first-year experience; and

<sup>16</sup> Kuh, G.D., Kinzie, J., Buckley, J.A., Bridges, B., & Hayek, J. (2006). *What matters to student success: A review of the literature*. National Postsecondary Education Cooperative.

<sup>17</sup> Hearn, J.C. (2006). *Student success: What research suggests for policy and practice*. National Postsecondary Education Cooperative.

- development of connections between learning opportunities inside and outside the classroom.

There is also a growing body of research suggesting a positive relationship between the proportion of full-time faculty members and completion rates at community colleges.<sup>18</sup>

Given that the majority of community college students are enrolled part-time and are typically on campus solely for their classes, there is a strong need to design educational experiences that incorporate advising and promote student interaction with faculty and their peers *in the classroom*.<sup>19</sup> For example, learning communities typically involve a cohort of students taking two or more courses concurrently that are connected by a central theme. This type of program increases the level of student academic and social interaction through classroom experiences and presents a promising alternative to the traditional “stand alone” courses that characterize many colleges.<sup>20</sup>

Early intervention programs identify high-risk students early in the semester and provide counseling, tutoring, and other student support services.<sup>21</sup> First-semester freshman seminars which meet as regular classes with an assigned instructor have been found to be positively associated with retention and graduation rates.<sup>22</sup>

There are numerous institutional practices that are beginning to show positive results in improving graduation and retention rates at community colleges. (See Appendix D for specific examples.) Such practices appear to be most effective when student success is clearly articulated as a primary institutional goal and there is an integrated, systematic, campus-wide approach which includes faculty, administration, staff, students, and student families.

### ***Fiscal Climate***

The current fiscal climate deserves special attention because of its impact on student success. As mentioned earlier, financial pressure is the most common reason Massachusetts community college students provide for leaving college prior to degree completion. Inadequate and unpredictable state appropriations for public higher education—including financial aid—over the last decade exacerbates the problem. Table 3 shows how state support for community colleges

<sup>18</sup> Bailey, J., Calcagno, J.C., Jenkins, D., Kienzl, G. & Leinbach, T. (2005). *Community college student success: What institutional characteristics make a difference?* (CCRC Working Paper No. 3) New York, NY: Community College Research Center, Teachers College, Columbia University; Ernst, B. (Fall 2002). *How over-reliance on contingent appointments diminishes faculty involvement in student learning*. Peer Review 5(2); Jacoby, D. (2006). *Effects of part-time faculty employment on community college graduation rates*, Journal of Higher Education, 77(6).

<sup>19</sup> Dr. Kay McClenney, Director of the Community College Survey of Student Engagement and an adjunct faculty member in the Community College Leadership Program (CCLP) at The University of Texas at Austin (personal communication, October 25, 2006).

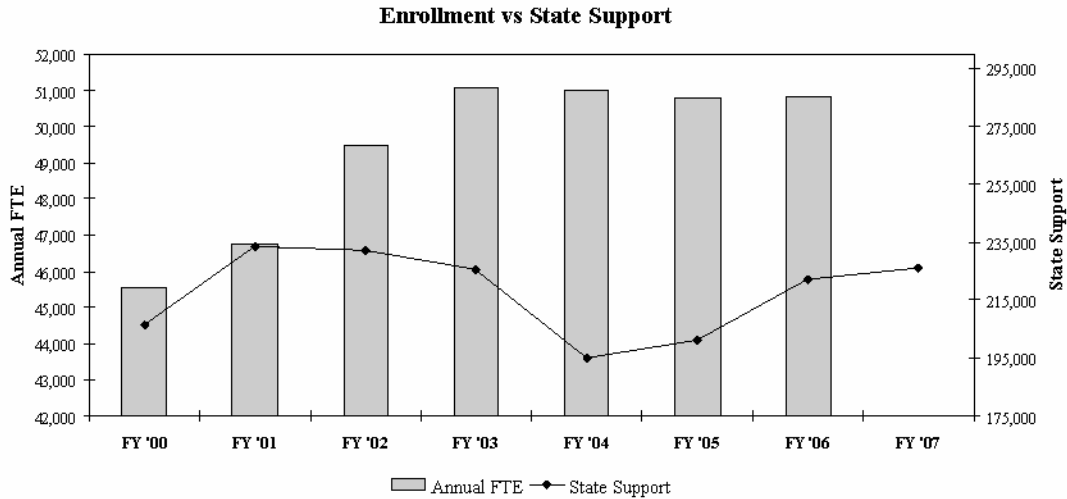
<sup>20</sup> Braxton, J.M., Hirschy, A.S., & McClendon, S.A. (2004). *Understanding and reducing college student departure*. AHSE-ERIC Higher Education Report, 30(3); Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence, *Journal of Higher Education*, 68(6); Taylor, K., with Moore, W.S., MacGregor, J., & Limblad, J., (2003). *Learning community research and assessment: What we know now*. National Learning Communities Project Monograph Series. Olympia, WA: The Evergreen State College, Washington Center for Improving the Quality of Undergraduate Education, in cooperation with the American Association for Higher Education.

<sup>21</sup> Grubb, W.N. (2003). *Using community colleges to reconnect disconnected youth*. Menlo Park, CA: The William and Flora Hewlett Foundation; Muraskin, L. (1997). “Best practices” in student support services: A study of five exemplary sites. Washington, DC: U.S. Department of Education, Planning and Evaluation Service.; Summers, M.D. (2003). ERIC Review: Attrition Research at Community Colleges. *Community College Review* 30(4).

<sup>22</sup> Muraskin, L., & Wilner, A. (2004). *What we know about institutional influences on retention*. Washington, DC: JBL Associates.; Pascarella, E. T., and Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research* (1st ed.). San Francisco: Jossey-Bass Publishers.

has declined while enrollments have risen or remained steady over a seven-year period, FY00 to FY06. When state support declines, colleges are forced to increase fees to students.

*Table 3. Enrollment vs. State Support at Community Colleges*



Source: BHE HEIRS.

Massachusetts community colleges rely almost exclusively on state funding and student charges in order to cover operating costs. One measure of the financial resources required by the community colleges to operate at standards consistent with national peers and stated Massachusetts higher education policies is the annual total budget requirement, as determined by the Board of Higher Education funding formula. The current funding requirement (need) of the community colleges, based on the FY08 budget request, is \$600 million. Over the past decade, there has been a widening gap between total need and total revenues of the institutions. The current “revenue gap” at the community colleges is \$118 million—or 20 percent of the \$600 million needed to properly fund the community colleges. This means that they are operating with only 80 percent of the resources needed to achieve the targets and policy goals of the system.

One impact of the revenue gap on graduation rate concerns the ratio of full-time faculty. As noted earlier, a higher proportion of full-time faculty is associated with higher graduation rates. The Board of Higher Education funding formula has set a target that 75 percent of all faculty at community colleges be full-time. However, only three out of the 15 community colleges meet this goal. The average percentage is 60 percent, ranging from 45 to 80 percent among the institutions.

### **III. MASSACHUSETTS FINDINGS**

The Task Force drew upon a wide variety of sources to gain an understanding of the background issues about student success, but relied exclusively on the Board of Higher Education's Higher Education Institutional Research System (HEIRS) data and a survey completed by the Massachusetts community colleges in spring 2006 in determining the following findings. The Board of Higher Education collected this data directly from community colleges in Massachusetts.

***1. More than 60 percent of first-time, full-time, degree-seeking students enrolling in community colleges are not college ready and require developmental coursework. These students have lower graduation rates than college ready students.***

Community colleges' open admission policy and commitment to provide all students with opportunities to pursue a higher education means that many students are not prepared for college level work and require developmental courses. Overall, 61 percent of first-time, full-time, degree-seeking students were enrolled in at least one developmental course and 27.4 percent were enrolled in at least two developmental courses in the fall of 2005. At the individual community colleges, the range for students enrolled in at least one developmental course is from 44 to 75 percent.

In Massachusetts, first-time, full-time, degree-seeking students who enroll in at least one developmental course in their first semester are less likely to complete their degree or certificate within three years of initial enrollment than students who do not need to enroll in any developmental courses. For this group of students who enrolled in at least one developmental course in fall 2002, their graduation rate was 12.7 percent as compared to 25.1 percent for students who did not enroll in a developmental course.

***2. Early completion of developmental coursework is essential for successful retention and graduation.***

Completing developmental courses in the initial semester of enrollment has a critical impact on retention and degree completion. As Table 4a shows, the three-year graduation rate for students who enrolled in and completed developmental coursework in fall 2002 was 19.1 percent. For students who did not complete developmental coursework begun in fall 2002, their three-year graduation rate was 3.8 percent. Also, 33.8 percent of students who completed developmental coursework in their initial semester were still enrolled three years later, as compared to 21.1 percent of students who did not complete the developmental coursework in fall 2002.

The completion of developmental coursework in the initial semester of enrollment also has a critical impact on the fall-to-fall retention of first-time, full-time, degree-seeking students. For students entering in fall 2003 who enrolled in and completed developmental coursework, 68.1 percent were enrolled at the same institution in fall 2004. For students who did not complete all of their initial developmental coursework, only 32.1 percent returned in fall 2004 (Table 4b).



Table 4a. Developmental Coursetaking and Three-Year Graduation Rates for First-time, Full-time, Degree-seeking Students

	Fall-2002 Cohort	HEIRS Graduation Rate	Still Enrolled
<b>Students Not in a Developmental Course</b>	<b>4,287</b>	<b>25.1%</b>	<b>27.3%</b>
<b>Students in Developmental Course(s)</b>	<b>6,599</b>	<b>12.7%</b>	<b>29.0%</b>
<i>Students completing all developmental course(s)</i>	<i>3,537</i>	<i>19.1%</i>	<i>33.8%</i>
<i>Students not completing all developmental course(s)</i>	<i>1,911</i>	<i>3.8%</i>	<i>21.1%</i>
<i>Cannot determine</i>	<i>1,151</i>	<i>7.9%</i>	<i>26.9%</i>
<b>Total</b>	<b>10,886</b>	<b>17.6%</b>	<b>28.3%</b>

Source: BHE HEIRS and the National Student Clearinghouse.

Note: Community college total includes 14 of 15 institutions.

Note: Methodological and cohort details differ from IPEDS in order to provide detailed developmental analysis.

Note: All awards had been earned before September 1, 2005.

Note: HEIRS Graduation Rate includes graduates from initial institution as well as those who graduated from other institutions.

Note: Still Enrolled includes enrollment at initial institution as well as those who were enrolled in other institutions.

Table 4b. Developmental Course-Taking and Fall-to-Fall Retention for First-time, Full-time, Degree-seeking Students

	Fall-2003 Adjusted Cohort	Percentage Retained at Same	Percentage Retained Anywhere
<b>Students Not in a Developmental Course</b>	<b>4,004</b>	<b>58.3%</b>	<b>69.5%</b>
<b>Students in Developmental Course(s)</b>	<b>7,182</b>	<b>54.1%</b>	<b>61.6%</b>
<i>Students completing all developmental course(s)</i>	<i>4,343</i>	<i>68.1%</i>	<i>75.8%</i>
<i>Students not completing all developmental course(s)</i>	<i>2,431</i>	<i>32.1%</i>	<i>38.9%</i>
<i>Cannot determine</i>	<i>408</i>	<i>36.3%</i>	<i>45.6%</i>
<b>Total</b>	<b>11,186</b>	<b>55.6%</b>	<b>64.4%</b>

Source: BHE HEIRS and the National Student Clearinghouse.

Note: Adjusted Cohort eliminates students from initial cohort who graduated prior to next fall term (if any) and would not be expected to return.

### 3. There are significant achievement gaps among groups of students based on income level, ethnicity, and gender.

Significant gaps in educational achievement exist among various student groups. As noted earlier in this report, national research shows that low-income students leave college without attaining a degree at higher rates than their wealthier counterparts. In Massachusetts, 74.4 percent of community college students have an expected family contribution (EFC) of \$3,850 or less, which corresponds to an annual family income of less than \$40,000. This number rises to 82.9 percent at the urban community colleges.

As shown in Table 5, certain groups including minorities and part-time students graduated at lower rates as compared to the overall average. For example, the number of minority students in the fall 2002 cohort who graduated was 7.4 percentage points lower than the average. For the sake of comparison, this analysis also constructed a cohort of first-time, part-time, degree-seeking students. The three-year graduation rate for this cohort was 8 percent, substantially lower than the full-time rate. This is not surprising given the short time frame for completion allowed by this measure.

*Table 5. Three-Year Graduation Rate by Selected Student Subpopulations for Fall 2002 Cohort*

		<b>Fall-2002 Cohort</b>	<b>HEIRS Graduation Rate</b>	<b>Still Enrolled</b>
Full-Time	ALL	10,886	17.6%	28.3%
	Minority	2,634	10.2%	28.1%
	Non-Minority	7,451	20.3%	28.4%
	Male	5,200	14.3%	27.6%
	Female	5,674	20.6%	28.9%
	Traditional Age (under 22 years)	9,258	16.6%	29.7%
	Non-Traditional Age (22 years and older)	1,613	23.1%	20.6%
Part-Time		5,544	8.0%	24.2%

Source: BHE HEIRS and National Student Clearinghouse.

Note: Community college total includes 14 out of 15 institutions.

Note: Methodological and cohort details differ from IPEDS in order to provide detailed demographic and tracking analysis.

Note: The full-time analysis is limited to students who enrolled as first-time, full-time degree-seeking students in fall 2002. The demographic breakouts of the full-time cohort do not add to the total full-time cohort because the minority, age, and gender analyses are limited to students with known race/ethnicity, known age, and known gender.

Note: All awards have been earned before September 1, 2005.

Note: The part-time analysis is limited to students who enrolled as first-time, part-time degree-seeking students in fall 2002.

In looking at fall-to-fall retention of first-time, full-time, degree-seeking students at Massachusetts community colleges for the cohort entering in fall 2004, 55.7 percent of all students returned in fall 2005. Similar to graduation rate patterns, we found that males, minorities, and part-time students returned the following fall at lower rates. The retention rate for minority students was 51.1 percent; for male students it was 53.5 percent and for the cohort of first-time, part-time, degree-seeking students, the fall-to-fall retention rate was 42.9 percent.

*Table 6. Community College Fall-to-Fall Retention for Fall 2004 Cohort*

	<b>Fall 2004 Cohort</b>
Full-Time	55.7%
Minority	51.1%
Non-Minority	56.9%
Male	53.5%
Female	57.7%
Non-Traditional Age (under 22)	53.9%
Traditional Age (22 and older)	56.1%
Part-Time	42.9%

Source: BHE HEIRS.

Note: The analysis is limited to first-time, degree-seeking students. The demographic breakouts are limited to full-time, first-time degree-seeking students. The demographic breakouts may not add to the full-time cohort because the minority, gender, and age analyses are limited to students with known race/ethnicity, gender, and age.

**4. The three-year graduation rate for first-time, full-time, degree-seeking students who complete a degree at the initial institution in which they enrolled (IPEDS) is one important measure of student success. Exclusive use of this measure obscures the unique mission of community colleges and does not include two thirds of Massachusetts community college students.**

To evaluate a community college’s effectiveness solely on the basis of the popularly-used IPEDS national graduation measure alone represents an oversimplification and distortion of the varied missions of community colleges. The issue is complex because the federal government’s IPEDS graduation rates measure is based exclusively on first-time and full-time students who complete their degrees in a certain timeframe (150 percent of the projected time), and who graduate from the same institution at which they started. However, first-time, full-time, degree-seeking students make up *less than one third* of the new community college population. Moreover, students who do not graduate within 150 percent of time or who transfer to another institution are considered failures by this measure.

This traditional IPEDS graduation measure is inadequate as the primary measure of community college success for the following four reasons:

**a) The measure captures only one third of students**

The traditional IPEDS graduation rate cohort captures 35 percent of new students entering Massachusetts community colleges. This number varies by institution and ranges from 19.2 percent to 47.1 percent. The traditional IPEDS graduation rate cohort excludes part-time students, transfer students, and students who do not begin as degree-seeking students. For example, this measure disregards part-time students who comprise 51.5 percent of new community college students who enrolled at Massachusetts community colleges in fall 2005.

*Table 7. Percentage of Students in the IPEDS Graduation Rate Cohort*

	<b>Fall 2003</b>	<b>Fall 2004</b>	<b>Fall 2005</b>
First-time, Full-time, Degree-seeking Students	11,386	11,884	11,765
New Student Total	33,193	33,285	33,644
<b>IPEDS Graduation Rate Cohort as a Percentage of New Student Total</b>	<b>34.3%</b>	<b>35.7%</b>	<b>35.0%</b>
All Students	81,996	81,412	80,588
Graduation Rate Cohort as a Percentage of All Students	13.9%	14.6%	14.6%

**b) The measure does not factor in time to complete developmental and ESL coursework**

By limiting the time to degree completion to “150 percent of normal time,” the IPEDS measure does not take into consideration that many community college students require developmental and/or ESL coursework that does not count toward a degree or certificate. In fall 2005, 61.3 percent of the first-time, full-time, degree-seeking students enrolled in at least one developmental course and 27.4 percent enrolled in at least two developmental courses. And in fall 2005, nearly one quarter of all credits attempted by the traditional graduation rate cohort were developmental credits that do not count toward degree completion.

**c) The measure does not factor in time for students who switch to part-time status**

By limiting the time to degree completion to “150 percent of normal time,” the IPEDS measure does not take into consideration that many community college students who begin as full-time students change their status to part-time due to financial, family, and employment considerations.

**d) The measure does not include transfer students**

The IPEDS measure is restricted to students who graduate from the same institution at which they had initially enrolled. Thus, the measure discounts the transfer function of community colleges by not taking into account those students who transfer from their community college prior to completing a degree or certificate. Currently, national transfer data is limited and also voluntarily submitted.

***5. The Massachusetts community college student retention rate is comparable to the national average.***

Retention rates—the other major traditional measure of community college student success—measure the percentage of entering students who return to the same institution the fall after their first semester. For the cohort of students entering Massachusetts community colleges in fall 2004, 55.7 percent of these students persisted returned the following fall. This compares to a national public community college retention rate of 58.4 percent.<sup>23</sup>

***6. There is incomplete data on and assessment of the effectiveness of existing programs and services available to help students succeed.***

In response to a comprehensive survey focusing on retention and completion rates, all Massachusetts community colleges indicated that they offer a multitude of interventions and programs to promote student educational attainment. The most common intervention programs to increase student success include tutors and mentors for students who fall behind academically; summer academic programs; and transfer centers or special advisors for students interested in transferring. The majority of institutions also provided regular advisor training and workshops; early identification of students at risk of withdrawing; support programs for first-generation college students; and childcare for students with children. A number of institutions employed unique and innovative approaches such as providing incentives for students who complete programs in a timely period; expedited degree completion programs; and additional assistance to students in developmental and “gatekeeper” courses.

Although the community colleges utilize a number of interventions, there is relatively little empirical evidence that examines the value of these programs or identifies the best practices.

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<sup>23</sup> There are small differences in methodology between the HEIRS retention rate and the IPEDS retention rate.

## **IV. GOALS AND RECOMMENDATIONS**

The following goals and recommendations are designed to improve student success for all community college students in Massachusetts: first-time, full-time, degree-seeking students, as defined by the national IPEDS measure (and which initially gave rise to the formation of this task force); and the majority of students, that is, those who do not meet these specific criteria. The IPEDS cohort of students represents, on average, one third of all new community college students in Massachusetts. Further, in recognition of the fact that Massachusetts community colleges remain chronically under-funded, an additional goal calls for leveraging available resources and advocating for increased funding in order to achieve task force goals.

### ***Goals***

#### *Improve student success*

- Increase the graduation rate for first-time, full-time, degree-seeking students who complete within 150 percent of time (IPEDS) to exceed peer, regional, and national averages within seven years.
- Increase educational goal attainment for the majority of community college students who are not included in the traditional graduation rate (IPEDS) measure.

*Develop comprehensive student success measures* for all community college students, including the two thirds who are not included in the traditional graduation rate (IPEDS) measure.

*Leverage financial resources* to implement task force recommendations.

### ***Recommendations***

<i>Improve student success</i>
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#### Expand support programs for community college students

- Provide each student with a customized education plan that is aimed at individual attainment, whether it be completion of one or more classes or a degree or certificate.
- Proactively encourage all students to pursue and complete degrees through individual advising, mentoring, and other forms of support. Ensure advising is regular, consistent, and accurate around specific academic and financial requirements for degree completion and graduation.
  - For first-time, full-time, degree-seeking, college-ready students: establish “graduation contracts” in which the campus guarantees that courses will be available to enable graduation within three years if students follow a defined program of study.

- Maintain a special focus on students who face barriers, through support services including intrusive academic advising and cohort-based support groups, particularly the following groups most at risk for non-completion:
  - Academically unprepared students who enroll in developmental courses
  - Low-income students who rely on their own income to meet college costs
  - Part-time students
  - First-generation college students
  - Students with family responsibilities, including single parents and those caring for children at home
  - Adult students who do not enter college directly from high school
- Develop new programs to promote engagement between community college students and faculty, advisors, and peers. Such programs could include, but are not limited to, learning communities, early intervention programs, and college success seminars.
- Create opportunities to increase student connections to the campus community including on-campus work, internships, and co-op experiences; on-campus child care facilities; and inclusion of students' family members and significant others in student orientation and related events.
- Expand program offerings to meet the wide diversity of student needs, including courses in multiple formats and at a variety of times; courses delivered in accelerated timeframes including weekends; online and hybrid (partially online) courses; and cohort models.
- Mutually align transfer requirements between community colleges and four-year institutions and make information on transferable courses easily understood and available to students and the public.

#### Increase college readiness of high school students

- Advocate for a mandatory college preparatory high school curriculum for Massachusetts public high school graduates that provides graduates with the skills needed for success in college and careers.
- Establish dual enrollment programs.
- Offer statewide college placement testing (Accuplacer) to eleventh grade students.
- Promote participation in GEAR-UP at eligible middle and high schools.
- Utilize the School to College statewide database to improve the connections between student performance in high school and college, and provide such information to educational institutions to help improve student performance.

### Increase full-time faculty and provide professional development

- Increase the overall percentage of full-time faculty at community colleges from 60 percent to 75 percent within seven years as recommended by the BHE funding formula.
- Offer faculty development opportunities in order to promote active student learning and cohort-based approaches to teaching.
- Establish an annual conference on student success to share research findings and best practices among community colleges in the Commonwealth, the region and the country.
- Fund faculty contracts in a timely manner.

### Elevate public awareness about the benefits of earning a community college degree or certificate

- Promote and publicize the positive financial and personal benefits of earning a degree or certificate from a community college.
- Promote to the Governor, the legislature, business leaders and the general public that the education of community college students is an investment in the Commonwealth's future.
- Support existing public awareness campaigns such as "Think Again" and "KnowHow2Go."

<i>Develop comprehensive student success measures</i>
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- Develop a campus-wide, long-term strategy to foster data-driven improvements led by senior administration incorporating additional measures of student success such as:
  - rates of degree or certificate completion, transfer to another institution, or current enrollment over the course of four, five, and six years;
  - student completion of developmental courses, college-level courses, and transferable courses; and
  - educational attainment of student groups based on part- and full-time status, income level, race/ethnicity, gender, age and degree-seeking status.  
(See Appendix C for a detailed description of potential measures.)
- Use data to inform decisions and implement change at the campus and statewide levels.

*Leverage financial resources to implement task force recommendations*

- Secure annual appropriations based on the Board of Higher Education and campus-approved funding formula in order to close the current funding gap that exists at the community colleges within seven years.
- Ensure continued and increased support for MASSGrant, the Commonwealth's primary need-based financial aid program.
- Secure \$2 million in state funding for dual enrollment programs.
- Involve government and civic leaders in securing financial support from the business community and other private sector interests to create student internships and provide student financial assistance.
- Develop incentive-based financial aid programs targeting college-ready, first-time, full-time, degree-seeking students as well as at-risk students, including those enrolled in developmental courses or those who are enrolled part-time.



## **V. STRATEGIES AND OUTCOME MEASURES**

### ***Improve student success***

Spring 2007

- The Board of Higher Education to implement the *School-to-College Report* and the *Higher Education Planning Module* as catalysts for discussion—statewide and within regions—about the academic performance of Massachusetts’ high school graduates in public higher education and strategies to improve their college retention and completion rates.
- The community colleges to support and promote a rigorous curriculum for Massachusetts public high school graduates seeking to attend Massachusetts public higher education institutions.
- The BHE to establish a Task Force on Student Transfer that will report its recommendations to the Board during the 2008-09 academic year.
- The BHE to promote college readiness to high school students with links through the “Think Again” campaign and website.

Fall 2007

- The BHE to report on full-time faculty rates at the community colleges as defined by the BHE funding formula.
- The community colleges to initiate and/or expand dual enrollment programs as funded by the legislature.

Spring 2009

- As part of the planned reporting on student success, IPEDS graduation rate data (for first-time, full-time, degree-seeking students) to be included in the Board of Higher Education’s FY09 Performance Measurement Report.

### ***Develop comprehensive student success measures***

Spring 2007

- The BHE to convene a working group with representatives from the community colleges to establish common student success measures and appropriate performance targets to be adopted by all community colleges statewide.
- The community colleges and the BHE to advocate for revised national measures to reflect all community college students.

Fall 2007

- The BHE to convene a statewide annual conference on measuring student success.

### ***Leverage financial resources***

In an ongoing collaborative effort, the Board of Higher Education and the community colleges to continually promote the following as proposed by the current FY08 BHE budget requests:

- close the funding gap in no more than seven years;
- restore \$79 million to the MASSGrant program to a level consistent with average community college tuition and fees to students whose estimated family contribution is equal to or less than \$3,850; and by \$75 million to expand eligibility to students whose estimated family contribution is from \$3,851 to \$10,000; and
- award \$2 million in funding for dual enrollment programs.

Spring 2007

- The Board of Higher Education and the community colleges to support the Financial Aid Task Force call to provide grants to Massachusetts public high school graduates who complete a rigorous curriculum, complete early assessment, and enter college within six months of high school graduation.
- The Board of Higher Education and the community colleges to develop a proposal for incentive grants for students with demonstrated financial need and who are classified as “at-risk” of not continuing their education beyond high school to be submitted in the FY09 budget.

Spring 2008

- The BHE to include early Accuplacer assessment of eleventh grade students in the FY09 BHE budget request.

## **APPENDIX A**

### **Charge to Task Force on Retention and Completion Rates at the Community Colleges**

#### ***Background***

In December 2005, Chairman of the Board of Higher Education Stephen Tocco called for the formation of a Task Force on Retention and Completion Rates in the Community Colleges. Following the work of the Task Force on Graduation Rates in the State Colleges, the Board of Higher Education is committed to gaining a more comprehensive understanding of certificate and degree retention and completion rates of community college students. Board of Higher Education member Jeanne-Marie Boylan will serve as its Chair.

#### ***The Charge to the Task Force***

The Task Force on Retention and Completion Rates in the Community Colleges is asked to:

- develop an understanding of the issues that impact certificate and degree completion for students at community colleges, and
- make recommendations to the Board of Higher Education on steps that can be implemented to support students enrolled at Massachusetts public two-year colleges to graduate in a timely manner or successfully transfer to a four-year institution.

#### ***Questions for the Task Force***

In executing its charge, the Task Force is asked to consider the following questions:

1. Within the context of the comprehensive community college mission, what is the importance of certificate and degree retention and completion rates to community colleges, their students and the Commonwealth?
2. What are the major issues that impact community college retention and degree completion rates? What are the barriers that community college students confront that impede timely degree completion?
3. What do we know about students who leave community colleges prior to completing a degree?
  - Who are they (gender, full-/part-time, ethnicity, financial need, program of study)?
  - When are they most apt to leave the college (after how many credits, semesters, etc.)?
  - Why do they leave?
  - What happens to students who leave prior to completing a certificate or degree (transfer to a four-year institution, gain employment, etc.)?
4. What are community colleges currently doing to improve retention and degree completion rates?

5. Are BHE and campus policies regarding transfer—such as the Transfer Compact, Tuition Access Program (TAP) and Joint Admissions—effective in creating a seamless pathway from community colleges to senior institution degree completion for community college students? If not, what can be done to make these policies more effective?
6. Against what standard(s) regarding retention and completion should our community colleges be measured? What are appropriate goals for Massachusetts community colleges?
7. What commitments, support systems, programs, and resources are necessary to create an environment that promotes student success and degree completion at community colleges?

### ***Product***

The Task Force is asked to respond to its charge by preparing a report to the Chancellor and the Board of Higher Education using the model of the State College Graduation Rate Task Force Report. The report should include a five-year plan for improving retention and completion rates in the community colleges, with specific goals and recommended strategies for their attainment.

### ***Timetable***

The Task Force will plan to meet monthly from February to June 2006, once over the summer and in September and October. A progress report will be provided to the Board at the June 2006 meeting, and a final report will be provided to the Board at its October 2006 meeting, in order to meet deadlines for 2008 budget submission.

## **APPENDIX B**

### **Members of the Task Force on Retention and Completion Rates at the Community Colleges**

#### ***Members***

Jeanne-Marie Boylan, *Task Force Chair; BHE Member, EVP Boston Sand & Gravel*

Mary Fifield, Ph.D., *President, Bunker Hill Community College*

Jennifer James, *Director, Office of Workforce Development*

Rosalind Jordan, *Research Director, Joint Committee on Higher Education* [Designee for  
Representative Kevin Murphy, *Joint Committee on Higher Education, House Chair*]

Carole M. Berotte Joseph, Ph.D., *President, Massachusetts Bay Community College*

Mark Lange, Psy.D., *Professor of Psychology, Holyoke Community College*

Milton James Little, Jr., *President and CEO, United Way of Massachusetts Bay*

Howard London, Ph.D., *Dean, Arts and Sciences, Bridgewater State College*

Senator Robert O’Leary, Ph.D., *Joint Committee on Higher Education, Senate Chair*

Patricia Plummer, Ph.D., *Chancellor, Board of Higher Education*

Ann Reale, *Member, BHE; Commissioner of Early Education and Care*

Ira Rubenzahl, Ph.D., *President, Springfield Technical Community College*

John Schneider, *Interim President, MassINC*

Richard Walker III, *Vice-President for Community Affairs, Federal Reserve Bank*

#### ***Former Members***

Bob Costrell, Ph.D., *Senior Policy Analyst, Governor’s Office*

Judith I. Gill, Ph.D., *Former Chancellor, Board of Higher Education*

Basan Nembirkow, *Superintendent of Schools, Brockton, MA*

Giselle O’Brady, *President, Student Government Assn., Roxbury Community College*

Patricia O’Brien, Ph.D., *Deputy Director, NEASC*

Karl White, *Executive Director, Fletcher Asset Management, Inc.*

#### ***BHE Staff***

Mario Delci, Ph.D., *Senior Policy Analyst*

Jonathan Keller, Ph. D., *Associate Vice Chancellor for Research and Assessment*

Eileen O’Connor, *Director of Communications and External Affairs*

Francesca Purcell, Ph.D., *Associate Director for Academic Policy*

### ***Research Consultants***

Thomas Bailey, Ph.D., *Director, Community College Research Center, Columbia University*

Brian Bosworth, *President, FutureWorks*

Nancy Brown, *Executive Director, Metro North Regional Employment Board*

Erika Kates, Ph.D., *Research Director, Center for Women in Politics and Public Policy,  
University of Massachusetts Boston*

Kay McClenney, Ph.D., *Director, Community College Survey of Student Engagement*

Nancy Ritze, Ph.D., *Dean, Institutional Research and Planning, Bronx Community College*

Carolyn Williams, Ph.D., *President, Bronx Community College*

### ***Community College Students***

Isaura Araujo, *Northern Essex Community College*

Robin Hounslow, *Quinsigamond Community College*

Melanie Crumble, *Quinsigamond Community College*

Judith Shumway, *Bristol Community College*

Tisha Williams, *Bristol Community College*

## APPENDIX C

### **Potential Student Success Measures Developed by the Board of Higher Education**

- Develop graduation measures that go beyond the traditional three-year rate to include four, five and six year rates for degree and certificate completion.  
Rationale: Entering cohort graduation rates are most pertinent to students who begin their college education as full-time, degree-seeking students. Although most (68%) first-time, degree-seeking community college students start full-time, many eventually become part-time students or even “stop-out” and return to college in subsequent years. By extending the time-span for measuring community college graduation rates, the successes of the many students who are unable to follow the path of continuous full-time enrollment will be captured.
- Demonstrate the successes of all community college students by tracking their retention and graduation rates by student subpopulations (for example: age, income, part-time status, race/ethnicity, gender, degree-seeking status and developmental needs).  
Rationale: Community college students, as a whole, are more diverse than their counterparts at four-year institutions. A better understanding of the unique needs of specific student populations can be obtained by investigating the academic performance of student subgroups. This increased understanding can serve as the foundation for policy decisions, program development and institutional practices.
- Enhance the centralized data collection system to enable the tracking of enrollment behavior, academic course performance and acceptance into majors on a semester-by-semester basis. Identify key academic courses, programs or transition points that present the greatest challenges to retention and graduation.  
Rationale: In addition to knowing the overall success rates of community college students, it is important to recognize the more common obstacles that students confront in their path to certificate/degree completion. By tracking the semester-to-semester progress of students, we can better determine the factors that slow down academic advancement. The critical stages or transitions in which students are most likely to be sidetracked from certificate/degree completion should be pinpointed.
- Focus on student completion of developmental courses in their first year. Track developmental course completion rates and the overall time required to finish all developmental course work.  
Rationale: The Task Force research shows that students who need developmental education and complete their developmental education are almost as likely to graduate as students who do not require developmental education. However, students who do not finish their developmental requirements in their first year are significantly less likely to graduate. Analysis of the progress of developmental students would provide information to identify further best practices such as early academic warning systems to keep students from falling off track toward academic success.
- Demonstrate the academic progress of those students who do not have degree attainment as their primary educational objective by developing measures that go beyond the traditional fall-to-fall retention rate. Semester-to-semester retention and course completion rates are two existing approaches that may be enhanced or replaced with alternative measures.  
Rationale: The traditional fall-to-fall retention rate is a nationally collected measure and is very highly correlated with graduation rates, but we also need effective ways to show the academic progression of the students who attend community colleges for workforce development, personal enrichment, English language training and other skill attainment. Many of these students do not need to be in college over the

course of two fall semesters. Shorter term retention rates may more appropriately capture the success of such nondegree-seeking students.

- **Conduct analysis of existing retention-oriented programs and highlight best practices.**  
Rationale: Empirical evidence is needed to help shed light on the effectiveness of institutionally-based retention programs. Program assessment can be used to enhance services and guide policy decisions. Campus leadership must strengthen its commitment to a campus-wide and integrated focus on student success.
- **Utilize the new School-to-College data system to assess the impact of dual-enrollment and high school preparation on the academic progress of community college students.**  
Rationale: An important component of student academic success is college-readiness. Students who have taken a strong core high school curriculum are significantly more likely to continue on to degree completion. Analyzing the academic progress of students in light of their pre-college educational experiences, will more effectively guide policy decisions.
- **Utilize findings and analysis of valid national assessment programs such as the Community College Survey of Student Engagement (CCSSE) or Foundations of Excellence® in the First College Year to develop a broader understanding of factors that influence student success.**  
Rationale: The CCSSE focuses on specific questions regarding college experiences, academic challenges, how students study and spend out-of-classroom time, student relationships and interactions with faculty, counselors, and peers, and the types of programs and activities that support learning. The CCSSE provides important information about student success factors that are not traditionally collected in the MBHE centralized database. Merger of the CSSE data with HEIRS data will enhance the assessment of the broader needs of students who enroll in our community colleges.
- **Further study the impact of the critical transfer function of community colleges. Utilize National Student Clearinghouse (NSC) data to help determine the post-transfer academic performance of students who begin their higher education in a Massachusetts public community college.**  
Rationale: Many students enroll in community college with the specific intent of transferring to another higher education institution to complete their degree or certificate. Student transfer is a relatively complex issue that is impacted by a variety of factors including articulation agreements among colleges. Some higher education systems have statewide articulation agreements that effectively guarantee that certain specified levels of education at a two-year institution will automatically meet general education and/or major requirements at four-year institutions.

Currently, there is no solid national measure for community college transfer. The IPEDS transfer data collection is voluntary and not consistently reported. Also, there is no prescribed duration of enrollment or level of academic attainment required for transfer to another college. For data reporting purposes, students are equally identified as transfers if they have taken a single course, several courses or completed a degree at their initial institution or the institution to which they transfer. Due to the “swirling” student phenomenon, in which students attend multiple institutions at the same time or within a short timeframe, the magnitude of the transfer function may be difficult to accurately evaluate. A separate taskforce on student transfer should be established to address these issues.



## APPENDIX D

### **Innovative Practices in Other States**

#### **1. Community College of Denver, Denver, CO:** *Using a social services model to support first-generation college students*

The Access and Success Project focuses on first-generation students. It utilizes a social service model and employs two education case managers who follow approximately three hundred students each. The case managers serve the role of advocates, helping students navigate academic, financial and personal issues. An early alert system warns case managers of possible student failure. In addition, the program requires students to participate in learning communities.

Laden, B. V. (2004, Fall). Serving Emerging Majority Students, *New Directions for Community Colleges*, 127, 12-13.

#### **2. Community College of San Francisco, San Francisco, CA:** *Enhancing services to at-risk students*

The Learning Assistance Center enables students in credit programs to obtain tutoring. An early alert system requires new students who take more than one developmental course to have check-in interviews with counselors three times a year. In addition, teachers in ESL classes generate lists of at-risk students five weeks into the semester who must then meet with counseling staff.

Choitz, V. (2006, April). *Strategies for Success: Promising Practices from the 2004 Winners of the MetLife Foundation Community College Excellence Awards*, Boston MA: Jobs for the Future.

#### **3. LaGuardia Community College, Long Island City, NY:** *Enhancing student retention through electronic portfolios*

Through electronic portfolios, students collect their work and analyze their progress at different intervals throughout their community college career. There are certain content requirements that student must meet, but students are encouraged to be creative and receive training to create the portfolios. According to the Community College Survey of Student Engagement, the online portfolios have increased student engagement. In addition, pass rates are higher in courses where portfolios are required. In the fall of 2005, the pass rate for portfolio classes was 75 percent, compared with 69 percent for similar non-portfolio classes.

Ashburn, E. (2006, October 27) Living Laboratories, 5 community colleges offer lessons that have produced results [Electronic Version]. *The Chronicle of Higher Education*, 53(10).

**4. Parkland College, Champaign-Urbana, IL:** *Enhancing developmental education and supporting at-risks students*

The Academic Development Center (ADC) provides services to unprepared students. Two student development advocates monitor students' progress and connect students to needed supports. An academic development specialist assists students with documented learning disabilities or with a history of academic problems. In the first year that the ADC was available student persistence increased 10 percent. The Center for Excellence in Teaching and Learning provides faculty training in developmental education.

Best Practices in Student Retention. (2006, April) *Community College Survey of Student Engagement Highlights 5(5)*. Austin, Texas: Community College Survey of Student Engagement.

**5. Saint Philip's College, San Antonio, TX:** *Supporting student retention efforts in large departments and aiding first-generation college students*

Through the New Advisors in Residence program (AIR), St. Philip's hired 10 full-time academic advisors and placed them in large departments with retention difficulties. AIR program advisors help students with class schedules, degree audits, course substitutions, and preparation for graduation and transfer. Advisors also serve as ombudsmen for students, helping them navigate the complexities of college life. The First Time College program is for students with no previous college experience. Students participate in learning communities; receive intensive advising, mentoring, and specialized tutoring; take advantage of career assessment and financial assistance; and attend student success workshops and orientations. Since St. Philip's launched the two programs in 2003, retention of students using AIR has gone up by more than 3 percent and the First Time College Program has resulted in a 20 percent increase in retention compared to the general population.

Best Practices in Student Retention (2006, April) *Community College Survey of Student Engagement Highlights 5(6)*. Austin, Texas: Community College Survey of Student Engagement.

**6. San Jacinto College North, Houston, TX:** *Improving Hispanic students' retention rates through early exposure to college*

The college has a several programs to reach out to Hispanic middle school and high school students. Start Trek brings in 8<sup>th</sup> graders to the community college for a half-day to increase college exposure. Spanish-speaking enrollment advisors work with PTA groups in targeted high schools to educate parents about the importance of college. The college also has other preparatory programs, such as Upward Bound and Gear Up. Hispanic enrollment increased 46 percent from 1996 to 2002.

Choitz, V, (2006, April) *Strategies for Success: Promising Practices from the 2004 Winners of the MetLife Foundation Community College Excellence Awards*, Boston MA. Jobs for the Future.

**7. Santa Fe Community College, Gainesville FL:** *Improving retention through on-line student advising and student-centered initiatives*

The college requires student advising through an interactive online advisement program before students register for classes. In order to expand enrollment to nontraditional students, flexible terms are offered, as well as hybrid online/onsite courses. Student can enroll in 7 week terms as well as 15 week terms. Initiatives have also been designed to increase students' connectedness with the community. For example, student groups have the option of meeting in dedicated study spaces or in Coffee 101, a wireless café on campus. Fall-to-fall retention for first-time students increased from 60 percent in 1999 to 65 percent in 2004.

Best Practices in Student Retention. (2006, April) *Community College Survey of Student Engagement Highlights 4(7)*. Austin, Texas: Community College Survey of Student Engagement.

**8. Sinclair Community College, Dayton, OH:** *Improving the educational outcomes of high-risk students*

Sinclair students who are identified as “high-risk” are part of a comprehensive Student Success Program that is designed to increase retention and graduation rates. The program is mandatory for approximately one third of Sinclair’s incoming students. Risk criteria include students requiring two or more developmental courses, poverty level income, undecided majors, working full-time, or transitioning from a high school dropout prevention program. Entering students with risk factors are automatically scheduled to meet with an Individual Learning Plan counselor. Using a case management approach, counseling, and web-based support system, high-risk students are supported and monitored. Students who take advantage of the Individual Learning Plan process are notably more likely to be retained to the next term than those who qualified but did not take advantage of the plan; 74.4 percent for participants compared to 62.6 percent for at-risk non-participants.

Best Practices in Student Retention. (2006, April) *Community College Survey of Student Engagement Highlights 5(7)*. Austin, Texas: Community College Survey of Student Engagement.

**9. South Texas College, McAllen, TX:** *Connecting students to the college community*

The college offers “hybrid” classes to increase peer interaction in the classroom. For example, the introductory English and biology classes are combined and team-taught. The goal is to create an active and engaged learning community where student interaction is encouraged. Students with different skill sets aid one another with the material and in doing so, build relationships.

Giegerich, S. (2006, Winter). Barrier Busters: Two-Year Institutions Help Students Achieve Their Dreams. [Electronic Version]. *Lumina Foundation Focus*.

**10. Tallahassee Community College, Tallahassee, FL:** *Improving student retention through early college exposure of high school and middle school students*

The college targets high school students in the community by offering dual enrollment courses, SAT prep courses, summer intensive programs, study skills seminars, and assistance with the Florida Comprehensive Assessment Test at area high schools. In addition, the College Reach Out Program provides a range of academic, counseling, and mentoring services to 450 low-income middle and high school students who would otherwise be unlikely to pursue college.

Choitz, V. (2006, April). *Strategies for Success: Promising Practices from the 2004 Winners of the MetLife Foundation Community College Excellence Awards*, Boston MA: Jobs for the Future.

**11. Tidewater Community College, Norfolk VA:** *Supporting students in “gatekeeper” courses*

Rather than target at-risk students, the college targets at-risk courses. Supplemental instructors attend classes with high failure rates and lead small-group study sessions. These instructors are either current students or recent graduates. The college already had an extensive tutoring program but it was found that students were either taking advantage of it too late, or were avoiding it altogether because of the stigma attached to remediation. Students who attend five or more of the group sessions have a 93 percent change of passing. The most promising results involve math courses. Remedial algebra has a 70 percent success rate with supplemental instruction, 61 percent without it.

Ashburn, E. (2006, October 27) Living Laboratories, 5 community colleges offer lessons that have produced results [Electronic Version]. *The Chronicle of Higher Education*, 53 (10).

**12. Valencia Community College, Orlando, FL:** *A comprehensive approach to improve student retention*

Valencia’s Teaching and Learning Academy offers professional development for all tenure-track faculty, and a similar program for adjunct faculty. The student advisement program helps student achieve career and educational goals. The Student Success Course, a three credit course, helps students develop goals, identify learning styles, build skills, and connect with college resources.

Best Practices in Student Retention.(2006, April). *Community College Survey of Student Engagement Highlights 4(8)*. Austin, Texas: Community College Survey of Student Engagement.