

# **Research on Maryland Community College Students with Disabilities for the 2005 Taskforce on Community College Students with Disabilities**

## **Growth in Enrollments**

The Maryland Association of Community Colleges (MACC) collected information on the number of students self-reporting as disabled in FY 2001. Over 5,600 students were reported with 15 of 16 colleges providing statistics, nearly a three-fold increase over 1991, when the community colleges reported that there were 1,531 credit students with disabilities enrolled that fall. MACC is compiling statistics for fiscal year 2005 and Fall 2005 from the individual community colleges to be incorporated in the annual MACC Databook.. MACC has also gathered statistics and estimates from recent national and state surveys which should help further the discussion.

## **Maryland vs National Enrollments with Disabilities**

There were about 22,160 disabled undergraduates in Maryland public colleges and universities in 2004 according to the National Postsecondary Student Aid Study (NPSAS) conducted by the National Center for Education Statistics. In Maryland, an estimated 11.7% of community college credit students in 2004 were disabled. Maryland has a slightly higher proportion than the national community college credit student population with disabilities at 10.8%. The number of students at community colleges with disabilities in Maryland is estimated to be 13,870 based on the NPSAS data.

Community colleges are attractive to many undergraduates, but students with disabilities tend to matriculate at community colleges at an even greater rate: 54% of undergraduates with disabilities attended community colleges in 1997 - 98, versus 35% of the general population of students. Community colleges typically offer more supports and services to students with disabilities than four-year institutions. The National Postsecondary Student Aid Survey of 2000 (NPSAS) indicates that community colleges are more likely to offer services specifically to meet the needs of students with disabilities, while four-year institutions often adapt services provided to all students to try to accommodate those with disabilities.

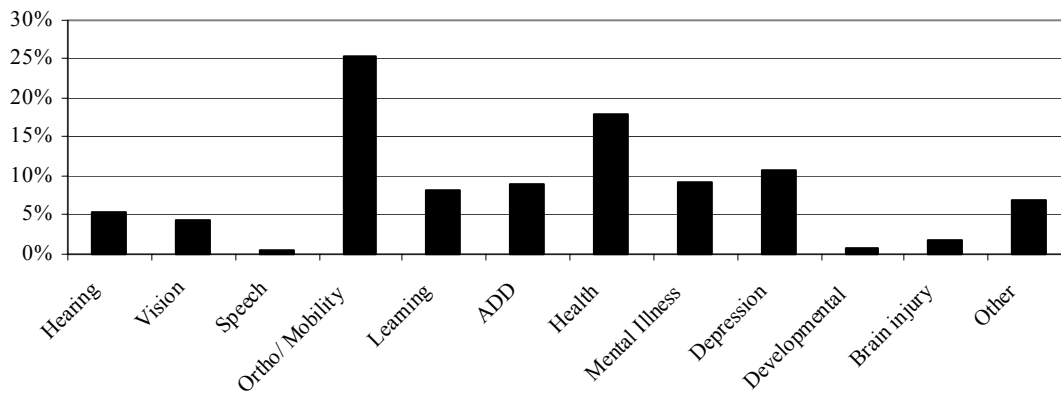
According to the NPSAS, “11 percent of undergraduates reported having a sensory, mobility, or other disability...; 9 percent reported having a disability that caused them difficulty as a student ...; and 4 percent considered themselves disabled.” The number of Maryland students who have disabilities is probably greater than those who request services or self-report their disability.

## **Survey Question on Disability Services Usage and Satisfaction Rates**

In spring 2004, ten of the sixteen Maryland community colleges participated in the Community College Survey of Student Engagement (CCSSE). The Maryland

consortium results indicated that 13% of credit students at community colleges had used disability services at their college, versus 8% of community college students surveyed nationwide. Based on the CCSSE percentage, an estimated 15,950 Maryland community college credit students used disability services at some point in their educational experience at the institution. Of those disabled students who expressed an opinion, 69% were satisfied with the services at the Maryland community colleges, the same level as nationally indicated.

## Types of Disabilities National Community College Students



NPSAS: 2004

### Disability Services and Accommodations

The some types of disability services and accommodations provided to community colleges students are listed below. The percentages represent the proportion of students, nationwide, with disabilities who reported in 2004 that they received the services from their colleges.

Support Services	% Students With Disabilities
Adaptive Equipment and Technology	4
Readers or Classroom Note-takers	5
Interpreters	1
Tutors	10
Alternative Exam Format	12
Registration Assistance	7
Course Substitution	2

### **National Research on Retention and Outcomes of Students with Disabilities**

Students attending community colleges are generally acknowledged to have more and higher risk factors with regards to their persistence and education goal attainment. Community college students with disabilities tend to exhibit these factors to an even greater degree. According to the NPSAS: 2004, students with disabilities are slightly more likely to have children (37% vs 35%) than other community college students across the nation. They are more likely to have completed high school through a General Education Development exam (GED) (13% vs 8%), and are less likely to enter postsecondary education within six months after high school (43% vs 51%). Although they are less likely to be employed while going to school than the average student, 73% of disabled community college students work at least part time. These characteristics compound the obvious challenge and risk to academic success inherent in being a student with a disability.

The increased risk factors mean that community college students with disabilities are even more challenged to achieve their goals. Students at two-year public institutions attained an award or continued with their studies 58% of the time, versus 55% of disabled students. The Beginning Postsecondary Students Longitudinal Study (BPS:90/04) indicates that students with disabilities are more likely to obtain a certificate from community colleges than their counterparts (21% vs 12%), are less likely to achieve an associate's degree (7% vs 18%), and are equally likely to have graduated with a bachelor's degree (6%) within five years of matriculation.

Despite the challenges, students with disabilities who persist with their education, going to college and earning a bachelor's degree, had similar outcomes to students without disabilities according to the Baccalaureate and Beyond Study of 1994. Most students were employed, 67% of those with disabilities versus 73% of those without. The average annual salary of \$26,988 for bachelor's degree graduates with disabilities in 1994 exceeded that for non-disabled peers. And 19% of graduates with disabilities versus 18% of non-disabled were enrolled in education programs following their college graduation. Graduates with and without disabilities reported their jobs were related to their degree in 58% and 55% of cases, respectively. Higher education is clearly an equalizer for persons regardless of disability status.

### **Cost Estimates for Serving Maryland Community College Students with Disabilities**

The annual cost of providing accommodations and services for all Maryland community college students with disabilities is derived based on the estimated number of students multiplied by the cost of the services. The community colleges in Maryland were surveyed in Fall 2004 for costs for their services and accommodations for students with disabilities. Using the average costs from this survey, the aggregate expense for the

services detailed below is estimated to equal \$7.1 million per year for all Maryland community college students with disabilities.

There were about 90,000 full time equivalent credit students at community colleges last year. About 13% (or 11,700) of Maryland community college credit students said they used disability services at their colleges. An estimated 1,755 students need tutors, note-takers and readers (a total of 15% of students with disabilities). If a quarter of the students with disabilities require help with documentation requirements, with related material costs, this would be an estimated 2,925 persons. The total annual cost of these individualized services would be about \$0.5 million per year.

<b>Individualized Services</b>	<b>Number of Maryland Students</b>	<b>Average Cost of Service</b>	<b>Annual Cost of Serving Students</b>
Tutors/Note-takers/Readers	1,755	\$363*	461,000
Documentation Materials	2,925	\$12	\$35,000
<b>Total Annual Cost Statewide</b>			<b>\$496,000</b>

\*average of \$650 and \$75 for professional and volunteers respectively

About 13% of undergraduates with disabilities received the services of specialized classrooms and labs, and assistive technology (AT) in 2004; however students in virtually all disability categories have indicated these needs. Clearly one lab/classroom and one AT workstation can serve more than one student. The survey of community colleges indicates they spend an average of \$18,000 per year on equipping specialized labs/classrooms. The table below shows estimated costs for the average annual outlay on specialized labs/classrooms per institution.

<b>Support Services</b>	<b>Number of Colleges</b>	<b>Average Cost</b>	<b>Annual Cost of Accommodation</b>
Specialized Labs/Classrooms	16	\$18,000	\$288,000

The average AT workstation costs about \$11,000. A reasonable assumption would be one workstation per 10 students, based on similar computer per student ratios for the general community college population. Computers are generally considered to have about a 3 to 5 year life, so if we assume a 4 year life, then the colleges would be replacing about 25% of the workstations each year. Additionally all old workstations would need software upgrades, at an estimated annual cost of about \$476 per computer.

<b>Support Services</b>	<b>Number of Workstations per Year</b>	<b>Average Cost</b>	<b>Annual Cost of Accommodation</b>
AT Workstations	293	\$11,000	\$3,223,000
Software Upgrades	878	\$476	418,000
<b>Total AT Workstation Costs</b>			<b>\$3,641,000</b>

<b>Services</b>	<b>Total Annual Statewide Cost</b>
Individualized Services for Students	\$496,000
Specialized Labs/ Classrooms	288,000
AT Workstations and software upgrades	3,641,000
<b>Statewide Annual Total</b>	<b>\$4,425,000</b>

The combined total of the individualized services and the specialized labs and workstations (excluding interpreter services) is \$4.4 million per year for Maryland community college students with disabilities, or about \$378 per student. This does not include estimates for costs of alternate format or Braille textbooks, or for C-print and remote real-time interpreting or captioning. It also does not include the costs of specialized staff and of training faculty to use the tools to assist their students with disabilities. It should also be noted that each college responds to the unique requirements of the students who enroll in their institution, not all colleges must meet exactly the same needs. This is an estimate of what it would cost to meet these particular needs of all the students with disabilities at all Maryland community colleges.

The high costs of interpreter services required by deaf and hard of hearing students are disproportionately borne by a handful of colleges. Based on a survey of the Maryland community colleges, an estimated 160 Maryland students are deaf or hard of hearing. Anne Arundel, Frederick, and Prince George’s Community Colleges and the Community College of Baltimore County enroll the majority of the students with hearing challenges in the state. The costs of providing the unique services needed by all Maryland community college students with hearing disabilities to be academically successful are estimate to equal \$2.0 million per year.

<b>Interpreter and Related Services</b>	<b>Number of Maryland Students</b>	<b>Average Cost of Service</b>	<b>Annual Cost of Serving Students</b>
Interpreters	160	\$12,500	\$2,000,000

In addition to the services provided, Maryland Annotated Code 16-106(c) of the Education title offers a tuition waiver to individuals who receive disability or retirement benefits under the Social Security Act. In 2004, approximately 1,148 students were attending community college using the tuition waiver: at an estimated average annual value of about \$600, this equals just under \$700,000 per year.

### **Cost/Benefit Analysis of Serving Maryland Community College Students with Disabilities**

The national evidence indicates that students with disabilities can have equivalent outcomes to non-disabled students, if they receive the services required to be successful in higher education. Community college students provide \$5,106 per student per year in economic benefits to Maryland through increased income, tax revenues and lower social costs, according to an economic benefit analysis conducted by CC Benefits in 2003. The additional expenses of meeting the basic needs of students with disabilities (\$6.4 million) equals about \$549 per student annually, increasing the estimated taxpayer (State and local) expense by about one third. However, the economic benefits still exceed the estimated costs by nearly 200% per year per student. Clearly, the payoff to the students with disabilities and to the community for providing the services to succeed in their higher education aspirations is well worth the investment.

#### **Sources:**

Original Analysis of National Postsecondary Student Aid Study, 1990, 2000, 2004.

*Disabled is defined as having a long-lasting disability or condition that has lasted six months or more. Indicates student has a long-lasting condition such as blindness, deafness, or a severe vision or hearing impairment; or a long-lasting condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying; or other physical, mental, emotional, or learning condition that has lasted six months or more. It does not indicate that the student has requested services as a result of disability.*

*Note: The disability section of NPSAS:2000 was more detailed and very different from that of previous NPSAS surveys. Consequently, direct comparisons between students surveyed in 2000 and in previous years may be misleading. The percentage of students indicating some sort of disability was substantially higher in NPSAS:2000 than in previous administrations of the survey.*

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Christophersen, K. and Robison, H. *The Socioeconomic Benefits Generated by 16 Community Colleges in Maryland*, CC Benefits, Inc. June 2003

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