



MARYLAND HIGHER EDUCATION COMMISSION

College-School Collaborative Activities Report



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MARYLAND HIGHER EDUCATION COMMISSION
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College-School Collaborative Activities Report

Background

The Commission asked the Secretary of Higher Education to prepare a report about collaborative ventures between higher education institutions in the State and elementary and secondary schools. The campuses had previously reported information on this topic for the Commission's review of teacher education programs. However, the institutions were invited to provide the Commission with a list of other academic and administrative projects which are being conducted jointly at the institutional level between their campuses and a Maryland elementary or secondary school. Overall, the response was positive. Fourteen community colleges, nine public four-year campuses, two of the University System of Maryland extension services, and 16 independent institutions (including all of the state-aided campuses) supplied the Commission with additional information. The Maryland State Department of Education also provided some information for this report.

Summary of Campus Collaborative Activities

Higher education institutions throughout the State are engaged in numerous joint ventures with Maryland elementary and secondary schools. The number and variety of these collaborative activities are impressive. Campus activities have been grouped into the following categories:

- Professional Development Schools
- Field Work
- Early Study Programs
- Continuing Education and Teacher Training
- Career Connections/Tech Programs
- Distance Learning and Instructional Technology Projects

An overview of the activities in each of these categories follows, along with a description of the collaborative ventures at each campus and a summary table.

Professional Development Schools

Professional Development Schools (PDS) are a collaboratively planned and implemented partnership for the academic and clinical preparation of teacher candidates and the continuous professional development of school systems and higher education faculty. The purpose of a PDS partnership is to improve student performance through research-based teaching and learning. Except for Morgan State University, University of Baltimore, University of Maryland Baltimore, Coppin State College and Salisbury State University, all four-year public institutions have implemented Professional Development programs. Among community colleges, Anne Arundel, Frederick, and Harford community colleges participate in grant-funded Professional Development Schools. The College of Notre Dame, Goucher, Hood, Johns Hopkins University, Loyola, Mount Saint Mary's, and Villa Julie College have also established professional development programs.

Field Work

Many higher education institutions reported collaborative efforts with elementary and secondary schools that include field work activities such as tutoring, student internships, mentoring programs, off-site courses, and community service activities. A number of four-year public institutions provide tutoring to area elementary and secondary schools. For example, the University of Maryland Baltimore County's Choice Middle Schools project is a collaborative effort linking teacher candidates at UMBC with tutoring opportunities to work with middle school students in the Baltimore region. At the University of Maryland, Baltimore, the School of Medicine sponsors a literacy project called *Reading Edge* which is designed to improve the reading level of first-grade children who need assistance. St. Mary's College of Maryland trains literacy tutors through its *America Reads Tutor Corps Program*. These tutors are placed in elementary schools in the area. Morgan State University's School of Engineering provides tutoring to middle school students in mathematics and problem-solving. Columbia Union, Goucher, Mount Saint Mary's College, St. John's and Villa Julie provide tutoring to local students. Among the community colleges, Americorps volunteers at Anne Arundel and Montgomery provide tutoring and other support to local schools.

Most institutions integrate student internship programs into their teacher education curriculum. Professional Development Schools offer future teachers intensive internships under the guidance of college and university faculty members. For example, UMBC offers yearlong internship programs to undergraduate and graduate teacher candidates at the Canton Middle School Professional Development School. At the University of Maryland College Park, students participate in student teaching and other types of field observations at a number of Teacher Education Centers located at public school systems in Anne Arundel, Charles, Howard, and Montgomery Counties. Several community colleges are working with local Boards of Education to improve instruction through internships to enhance traditional classroom instruction. At Allegany, students in education, human services, and Dental Hygiene programs participate in internships and clinicals in area public schools. Students at Charles Community College enrolled in education must participate in field work activities as part of the introduction to education course. Several independent colleges and universities are involved in student internship activities. Goucher, Loyola, and Villa Julie work with school systems to place student interns in elementary and secondary schools. At Hood College, Frederick County high school students participate in comprehensive professional work experiences at the College through the Mentor/Internship program. These internships include training and a career capstone simulation experience.

The University of Maryland, Baltimore provides a variety of unique field work activities that involve students from professional schools such as social work, Medicine, and Law. These activities are centered around community service with K-12 schools in communities near campus. For example, the Law School sponsors an after-school homework clinic at a nearby middle school. The School of Social Work provides clinical services to elementary and secondary school students and their families while the School of Medicine operates a school-based health center.

Early Intervention Programs

Colleges and universities throughout Maryland are working with public schools to provide early study programs such as dual enrollment and early intervention programs for middle and high school students. For example, Coppin State College has established an early study program that helps students in Baltimore City improve their abilities to understand and apply critical and creative thinking skills. Through its Project 2061, Towson University provides advanced science and mathematics preparation for elementary, middle, and high school students. The University of Maryland, College Park offers a number of early intervention programs that provide opportunities for students throughout the region. Morgan State University's Academic Champions of Excellence (ACE) is an academic enrichment program for low-income middle school students from Baltimore City Public Schools. Nine Baltimore area higher education institutions and Baltimore City Public Schools participate in Project PRIME (Programs to Recruit and Inspire Minorities into Education), which is a program aimed at recruiting minority students for teaching, beginning with interventions in middle and/or high school. Johns Hopkins University, along with Morgan, College Park, local school systems, and the business community, offer a multiyear precollege program called MESA. MESA is an achievement program designed to encourage underrepresented groups in mathematics, engineering, science, and technology. Both Washington College and Western Maryland provide early intervention programs as well.

A number of community colleges have made extensive efforts to provide early study programs. For example, Anne Arundel, Baltimore City Community College, Charles, Dundalk, Essex, Frederick, Montgomery and Wor-Wic offer early intervention services to economically and environmentally disadvantaged middle school students who are at risk for dropping out. Chesapeake, Carroll, Dundalk, and Wor-Wic offer a dual enrollment program for high school seniors. Carroll accepts high school advanced placement scores for college credit in a number of different disciplines.

Continuing Education and Teacher Training

Maryland higher education institutions are playing an important role in continuing education and teacher training. Many institutions work with local education agencies to ensure that secondary school teachers have adequate opportunities for professional development. Coppin, Frostburg, Towson, UMBC, UMCP, and Morgan provide a number of summer institutes, workshops, and in-service programs to elementary and secondary school teachers. The University of Maryland Biotechnology Institute (UMBI) and the University of Maryland Center for Environmental Science (UMCES) provide training programs for K-12 teachers in science and environmental education. For example, UMBI's Center on Public Issues in Biotechnology in cooperation with Coppin has developed a program on health and science for teachers in West Baltimore. The Chesapeake Bay Ecology program at UMCES provides a two-week workshop on ecology for middle and high school mathematics and science teachers. Among the community colleges, Allegany, Anne Arundel, Catonsville, Chesapeake, Dundalk, Essex, Garrett, Montgomery, and Wor-Wic provide professional development opportunities for elementary and secondary school faculty. At the independent colleges and universities, Capitol College, College of Notre Dame, Columbia Union,

Goucher, Johns Hopkins, and Loyola provide professional development and teacher training activities for elementary and secondary school teachers.

Career Connections/Tech Prep Programs

Most of the community colleges reported that they are involved in Tech Prep programs with local school systems to help prepare high school students for the increasing demands of the job market. Among the four-year public institutions, Morgan provides a three-week program for middle school students to prepare students for technical careers in engineering, computer science, and mathematics.

Distance Learning and Technology Projects

The use of distance learning technologies continue to grow among state colleges and universities. Many of Maryland's higher education institutions are working to integrate the use of technology into professional development, and in-service and preservice training for teachers. Other higher education institutions use computer aided instruction. For example, Coppin is working with Baltimore City area schools in a performance based technology applications partnership to build basic technology skills among education faculty, education majors and partner schools. Towson also offers technology training for preservice and in-service teachers. At Morgan, the Engineering School provides computer instruction to assist sixth, seventh, and eighth grade students in mathematics and problem-solving. At Capitol College, a professor is teaching linear algebra via distance learning to students at Suitland High School and Oxon Hill High school. Allegany, Anne Arundel and Catonsville also offer courses via distance learning to area high schools. Anne Arundel and Essex provide professional development opportunities for area teachers and staff in the use and integration of technology into instruction.

Summary of College-School Collaborative Activities Report

Community Colleges

Allegany College

Allegany College has undertaken a number of collaborative initiatives ranging from career awareness and development activities for area secondary school students to in-service training of K-12 teachers in computer systems. Through its early placement program, Allegany matriculates high school juniors and seniors who are determined to have an aptitude for college-level education. The College works with local high school faculty in math and English curriculum development. Allegany is also engaged in distance learning. The College provides introductory college coursework in math, psychology, sociology and English via distance learning system to area high schools.

Anne Arundel Community College

Anne Arundel Community College (AACC) is very active in collaborative partnerships with Anne Arundel County Public Schools. AACC participates in grant funded professional development school program. The College works with Towson University and Anne Arundel County public schools at Jessup elementary school to provide field work experiences and education courses. Anne Arundel offers education courses through distance learning and interactive teleconferencing. The College has also provides professional development opportunities for area teachers and staff in the use and integration of technology into instruction. In addition to its involvement in Professional Development Schools, AACC has maintained partnerships with area elementary, middle and high schools in mathematics, science, and social studies curriculum development. For example, since 1992, AACC has invited area social studies teachers to participate in interactive training sessions to improve their skills through the Telecommunication Teacher Training Conferences held at the College. The College also offers a number of initiatives that promote student success and lifelong learning. For example, through the Maryland National Early Intervention Scholarships and Partnership program, AACC targets middle school students for college, career awareness, and academic and personal enrichment. The College is also involved in a program for first generation college bound students in middle and high school which includes tutoring through Americorps volunteers.

Baltimore City Community College

Baltimore City Community College (BCCC) has established a number of collaborative programs with Baltimore City Public Schools. BCCC operates one of three high school Upward Bound programs available in Baltimore City. The Upward Bound program is designed to develop and enhance basic learning skills, to provide enrichment in different academic disciplines, and to foster motivation necessary for success at and beyond the high school level. BCCC also provides early intervention programs for area middle and high school students designed to encourage students to pursue higher education. In addition, the College provides an opportunity for high school juniors

and seniors to get an early start on college by offering college courses. Furthermore, BCCC is involved in a number of community outreach programs. For example, BCCC's Science Is For Everyone initiative is a joint project with Baltimore City Churches designed to foster and increase interest in science and math among inner city youths. BCCC offers several programs for teacher training. For example, the Counseling, Career and Transfer Center conducts workshops to strengthen the partnership with several middle schools. In addition, BCCC offers a wide range of Tech Prep programs to area public high schools.

Carroll Community College

Carroll Community College (CCC) participates in several collaborative ventures with the Carroll County Public Schools. The College participates actively with public school colleagues in Career Connections efforts. Carroll accepts qualifying high school advanced placement course scores for college credit in mathematics, biology, American and European History, English, Art History, Chemistry, Spanish, Economics, Government and Politics and Psychology. The College has implemented a concurrent enrollment program that allows students to take courses at CCC while still attending high school. Furthermore, CCC accepts transfer credits for early childhood education and LPN courses from the Carroll County school system's Career and Technology Center.

Catonsville Community College

At Catonsville Community College, high school juniors and seniors have the opportunity to earn a bachelor's degree in three years after graduation. Students begin their program of study at the Community Colleges of Baltimore County (CCBC) while still in high school. After graduation, they attend CCBC for one year and then transfer to Towson University, the University of Baltimore or the University of Maryland, Baltimore County for their final two years. Furthermore, high school juniors and seniors have the opportunity to earn high school and college credit while attending their school based science classes. Catonsville offers education courses through distance learning and interactive teleconferencing. The College continues to work with Baltimore County Public Schools in areas of program sequencing, course development, faculty externships and staff development. The College is also engaged in a partnership program with the United Parcel Service which offers high school juniors and seniors an opportunity to earn nine college credits while working part-time.

Cecil Community College

Cecil Community College is an active participant in a number of projects with Cecil County Public Schools. These projects include: School-To-Careers and Tech Prep; financial aid workshops; skills assessment; joint administrative meetings to discuss cooperative issues; an annual meeting between the County Board of Education and the Board of Trustees; and a college bound tuition scholarship program for public school students.

Charles Community College

In addition to the Southern Maryland National Early Intervention Scholarship and Partnership program, Charles Community College conducts a number of joint projects with area elementary and secondary schools. The College and Charles County public schools have formed an organization to address local education issues such as student success, and the use of technology. In addition, the College and the public school systems of Charles, Calvert, and St. Mary's counties jointly develop and deliver faculty and staff training. The College is also an active participant in the public-private partnership that attempts to connect school experiences with career opportunities. Furthermore, students at the College enrolled in education must participate in field work as part of the introduction to education course.

Chesapeake College

Chesapeake College is engaged in over 25 collaborative projects with area elementary and secondary schools. Chesapeake provides dual enrollment opportunities for high school students in five area public school systems as well as career connections and Tech Prep professional development and conferences with high schools. The College is also involved in a minority teachers program with Queen Anne's County High School. The College provides summer externship programs for high school faculty and a cooperative drama program with middle and high schools. In addition, Chesapeake offers college courses on site at a several middle and high schools and at the Caroline Career and Technology center.

Dundalk Community College

Dundalk Community College (DCC) is active in numerous collaborative programs with area public schools. For example, Dundalk's *Education for Responsible Parenting* program which provides internships for high schools students in DCC's day care center. The College also provides dual enrollment programs for high school seniors, early intervention and career connections programs for middle and high school students, and an accelerated bachelor degree program for qualified high school seniors. In addition, the College provides continuing education and training for area high school faculty.

Essex Community College

Essex Community College is involved in a number of activities with area public schools. The College continues its collaboration with Tech Prep/Career Connections initiative with Baltimore County Public Schools in the Northeast and Southeast areas and the Baltimore County Career and Technology Education Advisory Council. Essex also provides a summer workshop for middle school mathematics teachers to learn how to use new technology in the classroom. The College also offers a number of enrollment development activities. Examples include an early intervention program; special campus tours for high school seniors; and annual meetings with high school guidance counselors. In addition, the Business Management Department at the College and area schools are engaged in a number of collaborative activities such as a teaching agreement with Baltimore County Public Schools, classroom visits and seminars conducted by industry leaders.

Frederick Community College

Frederick Community College, along with Frederick County Public Schools (FCPS), and the Job Training Agency are partners in the Frederick County School-to-Career grant implementation. Both Frederick and FCPS have formed partnerships in a number of other programs including: task force on articulation; staff development activities related to School-To-Careers; and the Chamber of Commerce Free Enterprise Education professional development program. The College also works with several elementary schools each year in a career exploration project titled "I'm Going to College". This program provides fifth-grade students an on-campus experience from admissions, finance, financial aid, and instruction. In addition, Frederick participates in a grant funded Professional Development Schools (PDS) program. Through the PDS grant, Frederick offers several lower division courses that include a pre-service internship experience.

Garrett Community College

Garrett Community College participates in three major collaborative activities. Garrett is a member of the western Maryland consortia. In this activity, three community colleges, three local Boards of Education, and Frostburg State University are working to improve effective instruction through implementation of applied academics, instruction, learning communities, and internships to enhance traditional classroom instruction. In an initiative co-partnered with the Garrett County Board of Education and Frostburg State University, the College offers a summer institute program which provides in-service training to elementary and middle school teachers. In addition, Garrett's Tech Prep initiative involves programs and courses articulated between local high schools and the College. Garrett also emphasizes the application and use of technology in teaching math concepts.

Montgomery College

Montgomery College conducts a number of joint projects with elementary and secondary schools. These projects range from systemwide initiatives to individual activities undertaken at specific schools. In the Montgomery County Public Schools (MCPS) Partnership project, the College works with high school students to improve college readiness by administering college placement tests, counseling and advising students. This partnership also provides early intervention program for eleventh grade students in danger of dropping out of high school. Other joint programs with MCPS includes: workshops to encourage teen parents to stay in school; after school and summer enrichment programs for elementary and secondary school students; the Summer Biotechnology Institute which introduces middle school students to science careers; and an out reach program for math students. In addition, the College is developing a project with local high schools to provide college guidance to ESOL students and job skills to their parents. Furthermore, Americorps volunteers provide tutoring and other support to local schools.

Wor-Wic Community College

Wor-Wic Community College and the Worcester, Wicomico, and Somerset County Public schools participate in a variety of collaborative college-school activities. For each county, Wor-Wic coordinates Career Connections database reporting; implements of a dual enrollment program; and

articulates career technology courses. The College also provides inservice education for secondary school faculty, reading tutors to two elementary schools in Wicomico County, and staff from the college serve on a school assessment task force for Worcester County. In addition, Wor-Wic shares computers, software, and additional equipment with high schools in all three counties.

Summary of College-School Collaborative Activities Report

Four-Year Public Institutions

Coppin State College

Coppin State College (CSC) offers a number of collaborative programs with the Baltimore City and Baltimore County school systems. Although CSC has not engaged in any formal PDS activities beyond the planning stage, the faculty work collaboratively in providing workshops in such topics as: cooperative learning, dimension in learning, assessment and evaluation, classroom management and organization strategies, multiple intelligence, inclusive teaching practices, and learning styles. Other examples of continuing education and training programs for teachers include: providing support to beginning teachers during their first and second years of employment in the Baltimore Public School system; assisting Baltimore City in recruiting and preparing special education teachers; providing professional development training program for school teachers in performance assessment. Furthermore, CSC established a Saturday program that helps elementary school students improve their abilities to understand and apply both critical and creative thinking skills and strategies. Coppin is also working with Baltimore City area schools in a performance based technology applications partnership to build basic technology skills among education faculty, education majors, and partner schools.

Frostburg State University

Frostburg State University (FSU) received a grant from the Maryland State Department of Education (MSDE) to begin work on a PDS in Southern Garrett County. Through its PDS program, FSU offers teachers in Garrett and Allegany counties faculty development opportunities either specially designed courses or vouchers to take graduate courses. FSU offers a number of programs for teacher training and continuous education. The University offers work-based learning projects for faculty to assist in curriculum development. For example, FSU offers faculty externships in health education and the development of tourism courses in geography. The University also integrates School-to-Careers programs into the teacher education curriculum. Faculty and administrators from the University serve on a number of regional planning and development groups as well as participate in regional and statewide conferences with their K-12 partners. In Spring 1998, FSU staff will develop a listserv, chat room, and web site for use by the Western Maryland Career Connections participants to share ideas and syllabi.

Towson University

Towson University (TU) offers a number of collaborative school efforts and enhancement programs with area K-12 schools ranging from Professional Development Schools to teacher training and science and mathematics programs. In collaboration with MSDE, TU launched an expansive statewide network of PDS sites. The University has five PDS sites that are operational in Baltimore, Anne Arundel, and Howard counties. Towson's Professional Development Schools network provides viable infrastructure that includes stable connections between schools, universities, and local communities. In addition to PDS, TU offers teacher preparation and training

in reading science and mathematics to area school districts. The University also offers technology training for pre-service and in-service teachers. The University's Project 2061 provides advanced science and mathematics preparation for elementary, middle and high school students. Furthermore, the Departments of Nursing, Occupational Therapy, and Communication Sciences and Disorders have clinical placement services for many area public schools.

University of Baltimore

The University of Baltimore's (UB) major collaborative activity with K-12 is Maryland's History Day Program (MHDP). UB coordinates and hosts MHDP which is the State component of National History Day. MHDP is a history education program for students in grades six through twelve. During the 1996-1997 academic year, approximately 550 students and 35 Maryland middle and high school history teachers participated in History Day activities. During the 1997-1998 academic year, UB anticipates that student and teacher participation in this program will double. UB works with other USM institutions (College Park, Salisbury, and Frostburg) to establish regional programs and corporate sponsorships by Columbia Gas of Maryland.

University of Maryland, Baltimore

The University of Maryland, Baltimore participates in a variety of partnership and community service activities with local K-12 schools. For example, second year dental students participate in a screening program at a local K-12 school located in a low income community near campus. The School of Social Work participates in a program that provides social work services to students and their families in four Baltimore schools. The School of Medicine sponsors a project called the *Reading Edge* which is an intergenerational literacy program designed to improve the reading level of first grade children who need assistance in learning to read. The Medical School also operates a school-based health center for pregnant and teenage mothers in Baltimore City public schools. The Law School through the Black Law Students Association, sponsors an after-school homework clinic at a nearby middle school.

In addition to community outreach activities, UMB provides summer enrichment programs in the life sciences for over 2,000 high school, college and medical students. Pediatrics faculty at the School of Medicine offer on-site lectures to parent groups at local schools on such topics as enhancing school instruction at home, learning disabilities and managing a child's behavior. UMB participates in a science and mathematics education program that cultivates a positive environment and continuous enrichment for K-12 students and their teachers.

University of Maryland Baltimore County

University of Maryland Baltimore County (UMBC) has a variety of collaborative projects with K-12 schools. Currently, UMBC has PDS sites in Baltimore City and Montgomery County with plans to add additional sites in the future. The most fully developed PDS site is the Canton Middle School Professional Development School. This program offers year long internships to undergraduate and graduate teacher candidates at Canton. The University uses PDS funds to provide middle school faculty with opportunities to take UMBC methodology courses as part of

their professional development. UMBC continues discussions with other jurisdictions for the establishment of a number of a K-12 partnership in the Baltimore-Washington Corridor including Montgomery, Howard, Anne Arundel and Baltimore Counties.

UMBC has also developed a number of partnerships with K-12 schools. University faculty and middle school faculty are developing tutoring/mini-course model for use with middle school students. K-12 partnership continues in two Prince George's county high schools and three middle schools. These partnerships include pre-internship and internship experiences for UMBC teacher education candidates in the bilingual/ESOL track and for candidates in the general teacher education program.

In collaboration with Prince George's Community College, UMBC sponsored program for science and mathematics teachers, supervisors, and administrators from 17 Maryland school districts. UMBC project involves teachers from several counties and Baltimore city in professional development activities that help them develop science perspectives and hands-on experiences into their classrooms. UMBC English as a second language (ESL)/Bilingual program has established a professional development network with five schools in Prince George's county and delivers in-service workshops for teachers working with ESL/Bilingual students. UMBC/Choice Middle Schools project is a collaborative effort linking teacher candidates at UMBC with tutoring opportunities to work with middle school students in the Baltimore region. The University's teacher education reform efforts include extended internship programs for teacher candidates, integrated practicum experiences where student teaching is integrated with seminars and coursework, performance assessment for teacher education programs and the establishment of performance benchmarks. Also, faculty are engaged in efforts to revise the undergraduate teacher education program.

University of Maryland, College Park

The University of Maryland, College Park (UMCP) offers an extensive array of collaborative programs involving public schools statewide. Collaborative efforts include early intervention programs that offer opportunities for disadvantaged youth; college courses for high school students; and opportunities for gifted students. For example, UMCP's Kids to College program is an early intervention program for students in three middle schools in Prince George's County. Students participate in career exploration, college success skills, diversity workshops and the college preparation process. UMCP also offers a number of summer institute programs for students interested in computer science and engineering. These residential programs offer college level courses for public and private high school students in grade 11 from area schools who are interested in exploring educational and career opportunities in computer science and engineering.

UMCP also offers a number of partnership programs for K-12 teachers including teacher in-service education and faculty development; teacher pre-service education and career preparation; and professional development for administrators; Internet training and access; and has established ten professional development schools in three school districts. For example, the Howard County Professional Development School Center is a collaborative effort between UMCP and Howard County that has both a preservice and in-service teacher training component. Through its Office of

Laboratory Experiences and Teacher Education Centers, UMCP offers classes for cooperating teachers and other professional development activities for cooperating teachers.

Other collaborative efforts involve the development and assessment of curriculum and instruction such as programs for strengthening the teaching and learning of academic subjects, research on teaching and learning and collaborative curriculum development. For example, UMCP's Equity 2000 project focuses on improved mathematics instruction and new mathematics curriculum as well as improving guidance services in middle and high schools.

University of Maryland Biotechnology Institute

The University of Maryland Biotechnology Institute (UMBI) engages in three activities with Maryland elementary and secondary schools. The Science and Technology Education Center at the Columbus center in Baltimore in cooperation with the Columbus Center Development Inc. and UMBI-Center on Marine Biotechnology (COMB) provides a program for middle school students in the Baltimore region. The program involves hands-on science and the opportunity to meet scientists from COMB. UMBI's Center on Public Issues in Biotechnology in cooperation with Coppin State College has developed a program on health and science for teachers, youth leaders, and community leaders in West Baltimore. The Center also offered a half-day program for elementary students on biotechnology in agriculture. Furthermore, UMBI faculty provide laboratory experience of dozens of secondary school students at each of the four research centers.

University of Maryland Center for Environmental Science

The University of Maryland Center for Environmental Science (UMCES) provides continuing education and teacher training for K-12 faculty. UMES provides a number of field courses which involves hands-on training and activities for K-12 teachers to learn about the environment. The Horn Point Environmental Education Center conducts a training program for K-12 teachers on environmental education. The purpose of this program is to enable teachers to present environmental subjects in their school curricula in response to Maryland Environmental Education bylaw. The Chesapeake Bay Ecology program is for middle and high school mathematics and science teachers. The purpose of this program is to help teachers learn how to access and interpret Chesapeake Bay data and information with special focus on material posted on the Internet and offers a two-week workshop on the ecology of the Chesapeake Watershed. The Institute offers a course on the historical ecology of the Chesapeake Bay for high school juniors and seniors in Calvert and St. Mary's Counties. This course combines environmental science, marine ecology, history, and archaeology.

In addition to K-12 teacher training, the Institute offers research internships for K-12 mathematics and science teachers at both public and private schools and for undergraduate education majors at all levels.

St. Mary's College of Maryland

St. Mary's College of Maryland (SMC) is involved in several college-school activities with area public schools. St. Mary's plans to establish a PDS partnership with at least one elementary school. Also, through a program called *America Reads Tutor Corps Program*, SMC trains literacy tutors and places them in Title I elementary schools in the St. Mary's County School district.

Morgan State University

Morgan State University (MSU) is very active in collaborative partnerships with K-12 schools in Baltimore. Although MSU has not engaged in any formal PDS activities beyond the planning stage, the University operates three teacher education centers at an elementary, middle, and high school in Baltimore. The University offers a number of summer institutes and in-service programs to train K-12 teachers in science, mathematics, and technology. Furthermore, Morgan's future teachers program identifies, recruits, and prepares potential pre-college minority students to enter college and select a career in teaching.

MSU is involved in a number of early study and bridge programs including an Upward Bound for freshman, sophomores, juniors and seniors from neighboring high schools. This program seeks to motivate students to attend college by offering them a more realistic perspective of contemporary college life. Morgan offers year round classes where students attend classes on Saturdays, six-week summer sessions, tutoring, counseling, and cultural enrichment programs as well as parent and community involvement. This program also has a bridge component which offers high school graduates, previously enrolled in Upward Bound the opportunity to begin college in the summer session program. Another early study program includes Academic Champions of Excellence (ACE), a collaborative venture with Baltimore City Community College that provides an academic enrichment program for low-income middle school students from Baltimore City Public Schools. MSU is also the lead institution in PRIME, a collaborative program with Baltimore area higher education institutions and Baltimore City Public Schools designed to recruit minority students for teaching.

Several Schools with the University offer college-school collaborative programs to area middle and high school students. The School of Business and Management offers a course in finance for high school seniors and provides an entrepreneurship workshop to area middle school and high school students. The School of Engineering participates in the Maryland Mathematics, Engineering, and Science Achievement (MESA) program which works with elementary, middle and high school students to increase the number of minority and women who are prepared for the rigor of college study in mathematics, engineering, and the sciences. The Engineering School also provides a tutoring program and computer instruction to assist sixth, seventh, and eighth grade students in mathematics and problem-solving. Furthermore, the Engineering School offers a Math Bridge program designed to prepare pre-college freshmen majoring in science, engineering, and mathematics with the essential skills needed to succeed in the university's college level math courses.

Summary of College-School Collaborative Activities Report

Independent Colleges and Universities

Baltimore International College

Baltimore International College students visit elementary schools in the Baltimore area and participate in culinary activities with the elementary students.

Capitol College

Capitol College is a unique institution specializing in the academic programs of engineering, engineering technology, and engineering support for the information age. Capitol College and its students have been involved in the *Wire Schools* program and have helped to modernize elementary schools in Prince George's County by wiring the schools for Internet capability. A Capitol College professor taught linear algebra via distance learning to students at Suitland High School and Oxon Hill High School. Capitol College provides professional development opportunities in computer training in basic skills and software applications to school administrators and staff in Prince George's County. In addition to participating in career day activities at a number of secondary schools, Capitol College admissions personnel have conducted mock interviews at various Prince George's County schools.

College of Notre Dame

The College of Notre Dame offers extensive collaborative efforts with elementary and secondary schools in Maryland. The College, through its network of Professional Development Sites offers professional development experiences for college students and teachers. Notre Dame's Professional Development Sites extend to four counties (Baltimore, Anne Arundel, Harford, and Howard) and as many as 15 elementary and secondary schools in these counties. These sites are funded in part by a grant from the Maryland State Department of Education. In the Baltimore City public schools, the College is involved with a resident teacher program, an aspiring leaders program, special education certification, and the New Teachers Education Development Program. Through the Woodbourne Community Partnership, Notre Dame has been involved with three schools in west Baltimore for the past three years. These partnership seeks to turn the three schools into "community schools," opening their door from 7 a.m. until 11 p.m., 7 days a week, to offer educational and recreational services to students, their families, and the local community. Several Abell Foundation grants allow students and faculty to work with the Baltimore City School System. The College also conducts partnership activities with Baltimore County Public Schools in the following areas: a technology cohort, leadership programs, new teacher development, and a summer mentoring program. Notre Dame also provides numerous academic teacher development courses and activities.

Columbia Union College

Columbia Union College collaborates with Maryland elementary and secondary schools through its teacher education program and student placements at 12 local schools. Columbia Union participates in a lab school at John Nevins Andrews Elementary School. Furthermore, students and faculty provide tutoring and observation services to elementary and secondary schools.

Goucher College

Goucher College provides extensive collaborative activities with many elementary, middle and high schools in Maryland. Goucher conducts numerous staff development activities in four Maryland counties (Anne Arundel, Cecil, Harford, and Montgomery) for teachers, principals, administrators, and school improvement teams. Goucher faculty work with local schools in developing strategic planning skills and school improvement planning. A Professional Development School has been initiated by Goucher with a school in Baltimore County. In addition, over 25 elementary, middle, and special education Goucher students have been provided with intensive year long teacher education internships in multiple schools in four counties as recommended by the *Redesign of Teacher Education* report and the K-16 Leadership Council. A student internship is also available at Archbishop Curley High School through the HARBEL Substance Abuse Program. Student teaching has occurred at 12 elementary, middle, and high schools. Faculty and students also collaborate with many schools by engaging in an assortment of field work activities in child development, adolescent development, elementary reading and language arts, secondary reading, educational psychology, and special education. Another opportunity for Goucher students to work in the schools and receive academic credit is through participation in service credit options available in individual education, English, sociology, and theater courses. Finally, Goucher faculty and students participate in a number of community service projects with local schools by offering courses in peace studies, tutoring local school students, and working with Project SMART at Northern High School.

Hood College

Hood College participates in a wide range of collaborative projects with the Maryland community and schools. Hood's teacher education program operates an elementary Professional Development School (PDS) in Frederick County which was funded in part by a grant from the Maryland State Department of Education. The College offers student teacher internship opportunities and professional development experiences for school teachers through its PDS. Hood is also involved in the S. Christa McAuliffe Elementary School partnership in Montgomery County and in the Employer Incentive Fund grant, an extensive school to career initiative in Frederick County. Frederick County high school students can participate in comprehensive professional work experiences at the College through the Mentor/Internship Program. The internships include training and a career capstone simulation experience. High school interns can earn a scholarship for a college course by successful completion of the program. The College also collaborates with many elementary, middle, and high schools in a number of other programs including: Big Brothers/ Big Sisters, Girl Scouts, Singing Hands, Student Achievement Programs, the Maryland Tomorrow Mentoring Program, and the Salvation Army After School Program.

Johns Hopkins University

The Johns Hopkins University (JHU) is deeply involved in the primary and secondary education in Baltimore City and the State. JHU is currently involved in over 500 specific, school-based collaborations that touch the lives of students, teachers, and administrators in Baltimore City and in each of Maryland's 23 counties. Each of the University's eight major divisions is actively involved in K-12 collaborations that address Maryland's contemporary needs in areas such as: teacher education, research and evaluation, professional development, special education, gifted and talented education, teaching the disadvantaged, community service, performing arts education, school to work or college transition, policy analysis, site-based leadership, school reorganization, and education reform. No less than 20 of the collaborations respond to compelling and comprehensive Baltimore City and County needs, and at least three collaborative projects have a state-wide focus, mandate, and mission. For example the Mathematics, Engineering, Science Achievement Program (MESA) is a structured multiyear precollege program sponsored by the JHU Applied Physics Laboratory, Morgan State University, The University of Maryland, College Park, local school systems, and businesses throughout Maryland. MESA serves almost 100 elementary, middle, and high schools in Baltimore City and 8 Maryland counties. MESA is designed to encourage and assist underrepresented groups in mathematics, engineering, science, and technology. JHU's *Success for All* and *Roots and Wings* are comprehensive restructuring programs designed primarily for use in elementary schools serving many disadvantaged students. *Success for All* focuses on reading, writing, and language arts and *Roots and Wings* focuses on mathematics, science, and social studies.

The two programs serve 29 schools in Baltimore City and Baltimore, Charles, and St. Mary's Counties. The JHU Center on School, Family and Community Partnerships conducts the National Network of Partnership Schools project. In Maryland, over 210 elementary, middle, and high schools in at least 10 school systems are members of the National Network of Partnership Schools (170 participating schools are in the Baltimore City Public School System). The Center on School, Family, and Community Partnerships helps schools design and implement comprehensive programs of school, family, and community partnerships using an Action Team approach and a research-based framework of six major types of involvement: parenting, communicating, volunteering, learning at home, decision making, and collaborating with the community. The JHU School of Continuing Studies, Towson University, University of Maryland, College Park, and Bowie State University are working together to establish comprehensive Professional Development Schools for the preparation of teachers, teacher development, and the improvement of teaching and education. PDS development by JHU has been funded in part by a grant from the Maryland State Department of Education. The Division of Education with the JHU School of Continuing Studies participates in as many as 28 collaborative projects and activities with primary and secondary schools throughout the State. Some of the programs include: Professional Development Schools, Aspiring Leaders Programs, Special Education Leadership Conferences, Preparing Teachers of Students with Severe Disabilities, School Improvement Using Technology, and the Maryland Technology Network.

Loyola College

Loyola College has put into place eight Professional Development Schools (PDS): four in Baltimore County, two in Anne Arundel County, one in Baltimore City and, one in Howard County. The PDSs are designed to improve the quality of education for student teacher education interns, K-12 teachers, and students. The PDSs provide an extensive internship for prospective teachers, continued professional development for working teachers, and the opportunity to collaborate on research projects investigating teaching, learning, and innovative instructional practices. Loyola also collaborates with local school systems to place student interns in administration, school counseling, and special education.

Maryland Institute, College of Art

The Maryland Institute, College of Art (MICA) has a strong history of faculty and students assisting Baltimore's elementary school students in art-related activities. The MICA's Department of Art Education has informal working relationships with a network of schools in the greater Baltimore area. The single art discipline focus of the Institute's program requires a variety of sites to offer students the opportunity to experience teaching art in urban and suburban schools. MICA has developed internship placement programs with five schools in Baltimore City and County. MICA also places student teachers in schools throughout the greater Baltimore and Washington area including Baltimore City, Anne Arundel, Baltimore, Carroll, Frederick, Howard, and Montgomery Counties in Maryland, and Arlington and Fairfax Counties in Virginia. MICA performs site visits and observations at schools in conjunction with its courses. Finally, in collaboration with the Baltimore Museum of Art, MICA conducts "Family Tours" in conjunction with the *Critical Response to Art* course.

Mount Saint Mary's College

Mount Saint Mary's College is collaborating with Frederick Community College and the Frederick County Public School System to offer a Professional Development School (PDS) for the development of future teachers and the enrichment and professional development of current teachers and teacher educators. The PDS is funded in part by a grant from the Maryland State Department of Education. Mount Saint Mary's graduate students in the education program also are studying the impact of the PDS network on school culture, current teachers, and teaching interns. The College's education department supports the Reading Recovery Program through the training of elementary school teachers, and supports the Frederick County Public Schools "Super Camp" program by offering courses for special needs and at-risk students. Students in the Education Department's professional and research seminars support local School Improvement Teams by assisting the Teams with problem resolution and planning. The College has been an active member of the Frederick Alliance for Creative education. The major priority of the Alliance is to ensure that all students in Frederick County will complete high school and be offered reasonable opportunities to graduate from college or technical school. Students provide tutoring to local students in after-school programs and also provide homework assistance, supervise recreational activities, present educational videos, and conduct character building activities.

Ner Israel Rabbinical College

Ner Israel Rabbinical College devotes its academic program to the teaching of talmudic law and offering rabbinical degrees. The institution also houses a secondary school as a part of its academic program and the College and secondary school collaborate on a number of levels.

St. John's College

Students at St. John's College fill volunteer and paid positions in local elementary schools and facilitate AVID and Americorps programs at Annapolis Middle and High Schools. Supported by a four-year grant from the Howard Hughes Medical Institute, the College is developing a new math-science curricular model based on the College's seminar-discussion approach to learning. This model program, which will complement existing math-science instruction at the middle school level, is being produced and tested in collaboration with staff from several racially and economically diverse schools. Through the Project Politaе community service organization, St. John's student volunteers offer an on-campus tutoring program for students from Anne Arundel Public Schools.

Sojourner-Douglass College

Sojourner-Douglass College is involved with the collaborative and innovative Dunbar Community Schools Project. Sojourner-Douglass and the elementary, middle, and high schools in the Dunbar Community School Project work together and share resources to address issues, problems, and concerns common to the educational services of the schools involved. The College provides consultative and administrative support to the Project. In addition, students and faculty are involved in a mentoring program with Dunbar Middle School. The College has placed student teachers with 11 elementary schools in the following areas: Anne Arundel County, Baltimore City, Dorchester County, Howard County, and Prince George's County.

Villa Julie College

Villa Julie College has an agreement with Millbrook Elementary School and a tentative agreement with Chatsworth Elementary School for a Professional Development School Partnership. The Education Department at Villa Julie also has partnerships with many Baltimore County schools for the placement of students for teaching internships. Villa Julie's education students participate in field placement programs in early childhood and elementary schools. The students assist with tutoring, small group instruction, grading, and whole group instruction while developing professional skills. The English Department and Office of Community Service Learning sponsor a writing workshop and an outreach/tutoring program at Baltimore County elementary and middle schools. The Black Student Union sponsors a mentoring program at Pikesville Middle School. Also, optional service credit is offered to students who volunteer to work in local schools assisting with technology programs.

Washington College

Washington College has established a student teacher program with Kent County middle and high schools. The College is serving as the Eastern Shore administrative and fiduciary agent for the Maryland National Early Intervention Scholarship Partnership Program grant funded by both the U.S. Department of Education and the State of Maryland. Washington College works closely with the public school districts of Dorchester, Kent, Queen Anne, and Somerset Counties, overseeing their early intervention middle school programs. Students are involved with many tutoring and mentoring programs with local schools. Students provide free in-school and after-school tutoring services to elementary and middle school students, and often serve as mentors in programs as well. The College maintains a "Quick Response Team" of students who are on call for Chestertown Middle School to provide a college student mentor for students having difficulty during the school day. One Washington College student operates the *Service Happens* blitz mail bulletin board which provides a continuous information link between the public schools in the area and the College. The public schools can directly inform the student body of the volunteer needs at their schools.

Western Maryland College

Western Maryland College collaborates with many schools in the placement of student teachers from the education department. Every summer the Reading Clinic housed at Friendship Valley Elementary School serves 50-70 students. Summer reading courses also are offered in partnership with Carroll County Summer School. Western Maryland students participate in the reading recovery program with teachers of at-risk readers in Anne Arundel, Charles, Howard, and Prince George's Counties. The Deaf Education Summer Fun Camp provides specialized activities and experiences for hearing-impaired children. The College also participates in the Education Technology Consortium with Carroll County, Carroll County Public Library, and Carroll County Community College.

College-School Collaborative Campus Activities and Projects
A Summary of Maryland Public and Independent Higher Education Institutions

College	Professional Development Schools	Field Work (1)	Early Intervention Programs (2)	Continuing Education and Training For Teachers	Career Connections/ each Program Effort	Distance Learning and Instructional Technology Projects
Community Colleges						
Allegany		X	X	X	X	X
Anne Arundel	X	X	X	X	X	X
Baltimore City		X	X	X	X	
Carroll			X		X	
Catonsville			X	X	X	X
Cecil				X	X	X
Charles		X		X	X	X
Chesapeake			X	X	X	
Dundalk		X	X	X	X	X
Essex		X	X	X	X	
Frederick	X		X	X	X	
Garrett		X		X	X	X
Montgomery		X	X	X	X	
Wor-Wic		X		X	X	X
Four-Year Public Institutions						
Coppin		X	X	X		X
Frostburg	X	X		X	X	X
Towson	X	X	X	X		
UB		X		X		
UMB		X	X	X		
UMBC	X	X		X		
UMCP	X	X	X	X	X	X
University of Maryland Biotechnology Institute		X		X		
UM Center for Environmental Science		X		X		
Morgan		X	X	X	X	X
St. Mary's	X	X				

College	Professional Development Schools	Field Work (1)	Early Intervention Programs (2)	Continuing Education and Training For Teachers	Career Connections/each Program Effort	Distance Learning and Instructional Technology Projects
Independent Colleges and Universities						
Baltimore International College		X				
Capitol College				X		X
College of Notre Dame	X	X		X		X
Columbia Union		X		X		
Goucher College	X	X		X		
Hood College	X	X	X			
Johns Hopkins University	X	X	X	X		X
Loyola College	X	X		X		
Maryland Institute, College of Art		X				
Mount Saint Mary's College	X	X	X			
Ner Israel Rabbinical College		X				
St. John's College		X				
Sojourner-Douglass College		X				
Villa Julie College	X	X				X
Washington College		X	X			
Western Maryland College		X	X			X

Notes:

- (1) Includes internships, tutoring, mentoring programs, and school-based, off-site courses and experiences
- (2) Includes advance placement, dual enrollment, bridge and early intervention programs.

