#### SITE VISIT REPORT NORTHERN VIRGINIA COMMUNITY COLLEGE COLLEGE AND CAREER TRANSITION INITIATIVE (CCTI) HEALTH OCCUPATIONS

Site visitor: Dates: Principal partners: Elisabeth Barnett, UIUC December 15<sup>th</sup> and 16<sup>th</sup>, 2003 Northern Virginia Community College, Medical Education Center Fairfax County Schools West Potomac Academy Chantilly Academy Falls Church High School Reston Hospital

#### **Program Abstract:**

The CCTI program at NVCC is creating improved linkages between high school health academies/programs and college programs in health occupations, leading to jobs in high demand, high wage careers. All participating high school students will take college placement tests and have opportunities to improve their skills based on results, drawing on the college's experience with the NOVA Gold program. In addition, the partners are working together to better align the curriculum and to create dual credit course options. The college's new Medical Education Center offers an ideal setting for this project, especially because of its Medical Mall in which full primary and acute patient services are provided.

#### Northern Virginia Community College

Northern Virginia Community College (NVCC) is the second largest multi-campus community college-- and the most ethnically diverse one-- in the United States. Serving a student population numbering over 60,000 credit students and over 300,000 non-credit and continuing education students from over 117 countries, it strives to meet the educational and training needs of people with differing abilities, education, experiences and individual goals. NVCC is an open enrollment institution providing educational opportunities in occupational/ technical and transfer programs

NVCC serves Northern Virginia, one of the three major geographical areas that make up the Washington, DC area. Northern Virginia consists of the following jurisdictions: Arlington County, Fairfax County, Loudoun County, Prince William County, Alexandria City, Fairfax City, Falls Church City, Manassas City, and Manassas Park City. Fifty years ago, Northern Virginia was a quiet agricultural region, where the residents lived and worked within five miles of the Potomac River. Today it is home to approximately 1.8 million people, an increase of 24% between 1990 and 2000, far exceeding the national growth rate of 13%.

The minority population in Northern Virginia has grown by about 91% between 1990 and 2000. The Hispanic population (the fastest growing in Northern Virginia) increased by 112% during this period, whereas the non-Hispanic population increased by 17%. If this rate of growth remains constant, the Hispanic population of Northern Virginia will reach 22% or 443,510 by 2010.

The college's mission is to "respond to the educational needs of its dynamic and diverse constituencies through an array of comprehensive programs and services that facilitate learning and workforce development in an environment of open access and through lifelong educational opportunities." It does this by offering programs at five campuses--Annandale, Alexandria, Loudoun, Manassas, and Woodbridge. In addition, the Medical Education Center (MEC) recently opened and houses the college's Divisions of Nursing and Surgical Technologies and Allied Health as well as health education programs associated with two other institutions: George Mason University and the Virginia Commonwealth University.

## **Health Occupations**

Medical Education Center is the first specialized single-industry campus in the Virginia Community College system. It has been designed to provide nursing and allied health academic pathways that serve seven levels of students ranging from those in high school through those undertaking graduate studies, including both full- and part-time enrollees. An important component of the campus is the *Medical Mall* which contains primary care clinics, a Women's Center, a dental clinic, a pharmacy, a vision center and a medical lab. The mall was originally developed in 1995 under a grant from the Pew Charitable Trust which encouraged a strong focus on community preventive care. Services are provided by students under the supervision of qualified faculty, with about 25,000 patient visits logged each year.

The high school partners for this program are all located in Fairfax County, Virginia, a locale with one of the highest median incomes in the nation. Two of the schools, West Potomac and Chantilly, are structured as career academies, while Falls Church is a comprehensive high school with a strong health occupations program. Some dual credit course-taking opportunities are currently available. The academies are considered "schools within a school," with their own administration and guidance staff. Funding streams are also separate. Students from other area high schools come to the academies for about a third of the school day to participate in their health occupations classes.

The major industry partner is Reston Hospital Center, located near Washington Dulles International Airport. It is a full-service medical/surgical hospital with 127 beds and has served the residents of western Fairfax and eastern Loudoun Counties since 1986. The hospital specializes in maternal/child health, surgical services, urological services, cancer care, rehabilitation therapy programs, and diagnostic imaging. In addition, representatives of Inova Health System and Virginia Hospital Center have participated in discussions related to the development of the CCTI initiative. Partnerships among NVCC, secondary school systems and business and industry have existed for well over a decade in this region, but were enhanced in the mid-90's with the advent of Tech Prep. NVCC, as part of the Virginia Community College System, received funding to initiate a Tech Prep consortium. One of the first and most productive "clusters" to form within this region was the Health Cluster. Efforts were focused on enhancing programs at both the secondary and postsecondary levels through articulation agreements. In addition, procedures were established to allow high school students to receive various types of college credit for participation in college level learning experiences. Based upon this history of cooperation, the MEC took leadership in responding to the RFP for CCTI.

## The CCTI Program

The program at NVCC is designed primarily to establish clear linkages between existing high school health occupations programs and the parallel programs at NVCC, with a particular interest in increasing opportunities to earn dual credit. An implementation plan showing the linkages between the CCTI goals and program activities is shown in **Appendix A**. Updated versions of the plan will be posted on the CCTI page of the League for Innovation website as they become available.

School	Programs
Chantilly	Dental Medical Health Technology
West Potomac	Dental Occupational and Physical Therapy Medical Health Technology
Falls Church	Practical Nursing Medical Health Technology Emergency Medical Technician

Current plans call for the articulation of the following high school programs with nursing and allied health programs at NVCC:

Beginning in the current academic year, students in these programs participated in field trips to the Medical Education Center to learn about opportunities for postsecondary study and to discuss the value of taking a college placement test, either the ASSET test or the MICHIGAN EPT test (for non-native speakers of English). This has been presented to students as a tool to understand their progress in readying themselves for college level study at any institution they wish to attend. The tests will be (or have been) administered at their home schools under the supervision of the high school health faculty beginning in December 2003. Students are being counseled individually regarding their results. Approaches to the remediation of deficits are yet to be determined.

The college's very positive experiences with the award-winning NOVA Gold program, makes it likely that it will serve as a model for program development related to remediation. The NOVA Gold model has been used very successfully to help students in other career areas to improve reading, writing, and English language skills. College faculty are currently in the process of developing a NOVA Gold curriculum specifically for health occupations that will be used with postsecondary students needing remediation. Exploration is also underway of its appropriateness for secondary CCTI students.

In addition, Anne-Marie Glynn, Coordinator of Health and Science of the Fairfax County Schools, hopes that health occupations teachers are able to incorporate more reading, writing and math into their curriculum. A workshop that will be offered by the Center for Occupational Research and Development (CORD), in conjunction with the CCTI project, is expected to be a good resource in helping teachers to do this. However, there is some concern about the level of attendance that can be expected. Previous experience indicates that it can be hard to get teachers to come to new professional development sessions, especially when many other workshops are offered. She expects that career-technical education teachers will be more likely to implement contextual learning methods than academic teachers, who have not demonstrated much interest in this concept in the past.

The project places a major emphasis on increasing the alignment among secondary and postsecondary programs and developing new opportunities for dual credit. To accomplish this, a great deal of work is needed. There is a history of early attempts by NVCC and the high schools to work together that has left both sides skeptical about the merits of trying to do so again. Both are worried about whether they will be pressured to change curriculum. College faculty are particularly concerned with any changes that could be perceived to lower standards. In addition, a number of logistical issues have to be resolved. Due to differences in pay scales for teachers, the financing of dual credit courses is complicated. It is also difficult to arrange meetings between secondary and postsecondary faculty to discuss course content and alignment. Obstacles include the cost of hiring substitutes, problems with travel due to local traffic snarls, and concerns about disruptions to current classes.

However, many believe that the time is ripe for change. The new president of the college, Dr. Robert Templin, is very interested in partnerships with business and industry as well as with secondary schools. The new Medical Education Center is the product of an effective postsecondary partnership and offers new, very attractive learning facilities. A changing climate in secondary education is also evident. In addition, work has been done to develop mechanisms for financing these courses. The current plan calls for high school faculty teaching dual credit courses to be paid by college, while the college receives tuition payments from the high schools.

Additional program activities that may be incorporated as part of the CCTI project include:

• Creating mentoring opportunities for secondary students by pairing them with college students or faculty.

- Looking at opportunities for team teaching and other steps that would encourage the development of a sense of community among faculty.
- Exploring the establishment of joint student allied health clubs at both secondary and postsecondary sites.
- Finding ways to expand work-based learning opportunities for students at all levels in partnership with hospitals, including summer camps and internships.
- Consideration of further development of distance and on-line learning using emerging technologies such as *Centra*-7.

The college is also working to address another barrier to smooth transition for students. Due to high demand by students and scarcity of funding, MEC has a waiting list for matriculation into programs in many career areas. CCTI program partners have expressed concern that students coming out of high school CCTI programs will not be able to continue directly into college, with the result that they may lose momentum or turn to other career opportunities. The Provost and President of the college have been meeting to look at ways to resolve this problem, including the possibility of reserving a certain number of slots for secondary CCTI students.

The marketing of the CCTI program overlaps with marketing the MEC campus as a whole. Because of its location and newness, people in the area are relatively unaware of its existence. The situation is further complicated by the prevailing local perception that the only true college is a four-year college. Marketing materials are being designed to raise awareness of the program, the campus, and the value of a range of credentials in health care fields. In addition, Program Director Charles Whitehead is working with the television instructor at West Potomac High School to have a class create television spots to promote the program. Other steps that are planned include:

- Promoting the program in morning announcements at high schools.
- Contacting local newspapers regarding coverage of college and student activities.
- Sponsoring information booths at local events.
- Speaking at meetings of school counselors, teachers, and administrators.
- Participating in career nights at area schools.

### **Data collection**

Most work on the data collection system to date has been coordinated by Dr. Susan Hintz. Her broad experience with student testing and remediation has greatly contributed to this process. She believes that this aspect of the project will be relatively trouble-free. Others involved with the project expressed some concerns about a lack of fit between the college's data gathering practices and those expected under CCTI. There are also some questions about whether high schools will be willing to share student data. The current agreement is to share data by grade level and ethnicity only. Teachers will receive class profiles and may also receive individual students' scores, although this is still being worked out. The CCSSE will be used for the first time at the college this year and may be expanded to wider use in the future. Data collection will be facilitated by the recent hire of a new Project Manager who was selected in part because of his strong background in data management and analysis.

## Leadership and Support

Dr. Templin, President of NVCC, is relatively new to his position. He sees an important aspect of his role at the college as "raising questions about why things are done the way they are." He remarked specifically on the need for closer high school/college partnerships in the region. He strongly believes that the education community should think in terms of "our students," rather than of separate secondary and postsecondary enrollees. He also feels that many students are ready for and would benefit from 12<sup>th</sup>-14<sup>th</sup> grade programs leading to an Associate's degree and views the CCTI project as a supportive framework to look at issues of this kind.

Leadership at the MEC is uniquely structured. While the divisions of Nursing and Surgical Technologies and Allied Health are under the direction of the provost of NVCC's Annandale campus, Dr. Charlene Connolly, Provost of MEC, oversees the MEC campus itself as well as the Medical Mall and all special programs. Dr. Connolly has provided leadership for a large number of innovative, externally-funded initiatives at the college over the years, and she was responsible for organizing the team that applied for the CCTI grant. She has a clear vision for the way that the CCTI project fits into the overall future of the MEC campus as it develops.

Charles Whitehead and Susan Hintz have been very successful relationship builders with all of the program partners, a crucial element in this setting because of the history of problems among the education sectors. They have also had a primary role, along with Ronda Hall, in conceptualizing the actual operation of this program.

### **Advisory Council**

The Advisory Council includes representatives from the college, local hospitals, and secondary schools. According to Dr. Connolly, the group has been very dynamic and is thinking creatively about ways to enhance student transition in a wide variety of ways. Current membership is shown in **Appendix B.** 

### **Benefits of the CCTI Program**

The Medical Education Center is uniquely positioned to develop a strong and useful health occupations program to serve the needs of the region. The area in which they are located is growing fast and has a very high demand for health care workers of a variety of kinds. The new center, while not yet widely known, is very well appointed and large enough to eventually accommodate many more students than it currently serves. In part due to its association with the opening of this new center, the CCTI project is likely to contribute in important ways to the MEC's evolving role in serving secondary students. Because of the experience of the college in meeting the needs of the region's diverse student population, there are many reasons to believe that this project will be very successful in assisting students with special needs. They are very well positioned to help students to deal with multiple obstacles and to provide the extra assistance needed to increase their chances of success.

Further, MEC is taking leadership in a much needed and timely initiative to strengthen relationships between high schools and colleges in order to improve student opportunities. They are building the kinds of relationships with secondary school partners that are likely to become a framework upon which other initiatives can be developed. All of those connected with the project are very committed to seeing it reach its potential, and to improve student opportunities.

## Challenges Associated with the Program

This project also faces a number of challenges that it is working hard to overcome. The chief of these is a history of difficult relationships among area high schools and the college that the current group largely inherited from their predecessors.

Additional challenges include:

- Lack of visibility of the MEC campus.
- Community values that favor four-year colleges to two-year, and academic to vocational education. Many parents and students do not understand the range of opportunities available in health care occupations.
- The limited places available in the health occupations programs, leading to long waits for students wishing to enter.
- The lack of articulation in different levels of nursing instruction statewide, making it difficult to create seamless educational and career pathways.
- The need to find funding and an appropriate system to remediate high school students identified as needing help to be ready for college.
- Resistance by some high school teachers to college placement testing. A primary concern is that test results will be used to make comparisons among them. This has resulted in decisions to group student data. However, grouped data cannot be used to provide individual students with the targeted help that they need.
- Dual credit is seen to be problematic by different groups for a number of reasons. These range from concerns about whether college-level quality can be maintained to reluctance to create competition with current Advanced Placement offerings.
- Travel anywhere in the region is difficult due to excessive traffic.

### The Future

The college is clearly on track to develop excellent pathways from high school to college. Their unusual combination of physical/curricular resources and individual talent will permit them to create a system that will greatly benefit the students of northern Virginia. As part of a six-campus college, many of the ideas piloted under the auspices of this project have the potential to be more widely utilized. As secondary/postsecondary relationships improve in relation to health care options, it is highly likely that partnerships will develop in other occupational areas. The enthusiastic secondary school representatives involved with the CCTI initiative are well positioned to replicate many aspects of this project. In addition the Director of CTE and Adult Education in the Prince William County Schools, is poised to bring additional schools into the project. Finally, President Templin is clearly paying attention to this initiative in order to provide his support as well as to broaden useful practices to the rest of the NVCC community.

# Appendix A: CCTI IMPROVEMENT PLAN

Northern Virginia Community College

## Site Partnership

Outcome #1	Strategy	Action Steps	Deadline for each step
Reducing the need for remediation of students entering post secondary education.	<ol> <li>Aligning curriculum in nursing and allied health – review existing programs of study for Health and Medical Sciences         <ul> <li>Tech Prep</li> <li>SOLs</li> <li>Technical core in occupational area</li> <li>Dual enrollment</li> <li>Make Programs of study coherent</li> <li>Post Secondary faculty agree to accept content and course work at Secondary level for advanced standing</li> <li>Update articulation agreement</li> <li>Quality faculty professional development</li> <li>Place faculty in industry for "real world" update</li> <li>Align Secondary and Post-Secondary faculty together in experiences to include seminars, test-writing skills, instructional strategies for contextual learning</li> </ul> </li> </ol>	1. Identify Health Occupation and Health Professions programs of study to be reviewed. Assess issues derived from strategies a. – g	06/2004
	2.Use of standardized assessment tests (NVCC placement test English and Math)to determine aptitude as a requirement to placement into secondary Health Professions program	<ol> <li>Arrange for "faculty in the workforce" program. Provide a series of professional development activities that bring secondary and postsecondary health professions faculty together.</li> </ol>	06/2004
	3. Develop a support program in response to the data derived from testing to support academic or skill deficits.	<ol> <li>Schedule test dates and administer tests at the three participating high schools or bring students to the MEC. Create database with test results and identify</li> </ol>	6/04

a.	Actions for Adult Learners	students in need of remediation.	
b.	Supplement existing programs with		
	customized NOVA GOLD at MEC		
С,	Addressing psychological barriers to retention		
	and success		
d.	Contextual oral communications classes		
	ENG 003, ESL 005, 007, 011, ENG 005 ESL		
	006, 012, ESL 013, 017, ESL 008, ESL 009,		
f.	ENG 111/009		
a.	Continue HCOP at Post-Secondary and in		
g.	community centers and at Secondary level		
	community centers and at Secondary level	4. Place students requiring remediation in	1/04
			1/04
		appropriate academic skills courses	
		E Toron Laws and the second Wester Italian and the "second state" of the second state	0/02
		5. Implement new "health-centric",	8/03
		interdisciplinary developmental and ESL	
		courses at the MEC	
Practi	ces to reaching the goal:		
Studen	its who want to enter Health Professions	Anticipated Barriers to "Closing the Gap"	
Program	ms to take college English and Math Placement		
Tests		Confidentiality, cost, fear of college	
		interference at the secondary level	

Outcome #2	Strategy	Action Steps	Deadline for each step
Increasing enrollment and persistence in	Student-Centric Strategy Develop a student-centric (focused)	<ol> <li>Establish mentor center for Secondary and Post-Secondary</li> </ol>	2/04
postsecondary education.	concept related to all aspects of this program which focus on student	<ol> <li>Develop career readiness modules for Secondary and Post-Secondary learners</li> </ol>	2/04
	outcomes and increased opportunities for students to engage	<ol> <li>Develop awareness program for case management for Secondary students</li> </ol>	12/03
	in nursing and allied health awareness building activities, enrollment at the secondary level in	<ol> <li>Create after-school nursing club that links Secondary students to Post-Secondary faculty and professionals in industry</li> </ol>	12/03
	health occupation programs and entry into health professions programs at the post-secondary level.	<ol> <li>Secondary field-trip to Post-Secondary for placement testing, academic counseling, career information and college admission (parental info before day of trip)</li> </ol>	10/03
		6. Create database of potential students	12/03
	Practices to reaching the goal: Establish Mentor Center, i.e. development Develop readiness modules Develop awareness program for Case Management Develop after school clubs Need a "Future Nurses of America" Club Develop application information from perspective Develop Broadband students (prehealth) synchronized classroom, come on-site to take the training Paraprofessionals proctors test	<ul> <li>Anticipated Barriers to "Closing the Gap"</li> <li>"TEST" students early</li> <li>Money (Target Rising Juniors) to get them to the college to become a college student</li> <li>Finding dollars</li> <li>Transportation</li> <li>Self Schedules by Schools</li> <li>Parents and some counselors view Health Career as vocational</li> <li>Setting up the structure for implementation Student and Guidance Counselor "by in</li> </ul>	

Outcome #3	Strategy	Action Steps	Deadline for each step
Improving academic and skill achievement at secondary and postsecondary levels.	1. Focusing on at risk students early at the secondary level by providing contextual opportunities for learning rigorous academic content.	1. Compare 11 <sup>th</sup> grade assessment in FA03 Health Occupations programs in Fairfax County (≈150 students) and 12 <sup>th</sup> grade assessment	12/03
	2. Assessment leading to early intervention	Identify students who are under- prepared	12/03
		Develop professional learning communities of Secondary and Post-Secondary faculty	6/04
		Explore strategies for intervention, associated costs, team membership, etc.	6/04
	<ul> <li>Practices to reaching the goal:</li> <li>Develop Professional learning communities with Secondary and postsecondary teachers</li> <li>Contextual learning in academic areas</li> <li>Common planning time</li> <li>Tutoring special programs</li> <li>Explore strategies and interventions</li> <li>Test 4<sup>th</sup> and 12<sup>th</sup> graders</li> </ul>	Anticipated Barriers to "Closing the Gap" Transportation	

Outcome #4	Strategy	Action Steps	Deadline for each step
Increasing the number of postsecondary degrees, certificates, and licensures.	1. Dual enrollment and other acceleration strategies	1. Bring cohorts of student to readiness modules	12/03
	<ul> <li>Practices to reaching the goal:</li> <li>Professional development for faculty → transition courses for e-learning.</li> </ul>	Data collections and analysis of students showing interest but under-prepared (identified on application)	12/03
	<ul> <li>College/Industry partnerships</li> <li>Look at Models for consortium approach.</li> <li>Identify areas of ↓ enrollment</li> <li>Dual enrollment with ↑ ease</li> </ul>	Review current certificates and Post-Secondary degrees and compare to industry need (current and future)	12/03
	<ul> <li>for students</li> <li>Review current certificates and postsecondary degrees and compare against current and</li> </ul>	Identify areas of decreased enrollment to market health tech options	12/03
	<ul> <li>future needs.</li> <li>Capture data that compares against current and future needs</li> </ul>	Add information sessions about health tech programs at off- campus sites	12/03
	<ul> <li>Capture data that compares students who indicated an interest in Health Careers but didn't enroll, with those placed</li> </ul>	Offer professional development for faculty to develop alternative delivery options for courses	6/04
	in developmental Math English and ESL	Explore e-access for dual enrollment	6/04

Outcome #5	Strategy	Action Steps	Deadline for each step
Improving entry into employment and/or further education.	1. Align graduation requirements to entry level employment	<ol> <li>Review current programs of study to identify programs that provide students with direct entry into workforce and identify any advanced standing from those programs that can be articulated.</li> </ol>	10/03
		2. Align curricula, see goal #1	06/04
		3. Review current, see goal #4	12/03
	<ul> <li>Practices to reaching the goal:</li> <li>Develop transition modules with approved programs of study</li> <li>Review current programs of study to identify those that can give students direct entry into work force</li> <li>Identify any advanced standing from those programs that can articulate.</li> <li>Review industry standards and compare current and future needs.</li> </ul>	<ul> <li>Anticipated barriers to "closing the gap"</li> <li>Transportation</li> <li>Cannot complete NAS 150 in 6 weeks</li> <li>State says that we cannot offer developmental courses to High School Students and currently High Schools don't offer either.</li> </ul>	

#### **Appendix B: Advisory Council**

#### Northern Virginia Community College Advisory Committee

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