



**Dr. Delores A. Parker, Vice President  
Academic and Student Services**

**North Carolina Community College System  
Preparing North Carolina's World-Class Workforce**



## **Closing of PBS ALS Operations Will Not Affect NCCCS Consortium Telecourse Licensing**

Ms. Jalaine Gross, NCCCS

On February 10, 2005, PBS announced that its Adult Learning Service would cease operations effective September 30, 2005. Clinton O'Brien, Senior Director of PBS ALS, sent this message to many of our colleges. To stay current with the changes at PBS go to their web site (<http://www.pbs.org/als/>), email them at ([als@pbs.org](mailto:als@pbs.org)), or phone them at 800-257-2578.

The NCCCS licenses many of our telecourses through PBS ALS. The closing of their Adult Learning Service operations will not affect the way the NCCCS licenses telecourses. Instead of licensing the courses from PBS ALS, we will license them directly from the telecourse producers. During the past few years, we have been licensing many courses directly from course producers such as Intelecom, Coast Learning Systems, and Dallas Telelearning.

The NCCCS telecourse licensing process will continue to work the same as it has in the past. During each semester, colleges that are conducting telecourses and/or teleweb courses that are licensed by a vendor (producer), shall report these courses and the number of students enrolled to the NCCCS Office. This report is due no later than fifteen (15) days after the 10% reporting period deadline. If no telecourses or teleweb courses that are licensed by a vendor are used, the college should send a negative reply to the System Office. The NCCCS Office will be responsible for the payment of any

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telecourse licensing fees. The respective college will be responsible for payment of any per-student enrollment fees. Telecourse enrollment reports should be submitted to Jalaine Gross, Distance Learning Coordinator, at the NCCCS Office.

PBS ALS has established a page on their website that provides information regarding the transition at the following link:

<http://www.pbs.org/als/transition.htm#docs>. On this transition page, PBS has a chart listing contact information and licensing arrangements for each course currently distributed by PBS. This chart is available online (html) at [http://www.pbs.org/als/downloads/transition/course\\_licensing\\_contacts.htm](http://www.pbs.org/als/downloads/transition/course_licensing_contacts.htm). For the most up-to-date version of this chart, refer to the transition information column located on the left side of the transition page.

In addition to the chart, the transition page has specific messages from the following course producers that explain how to continue licensing their courses.

Governors State University, producers of the following courses currently distributed by PBS:  
Beliefs and Believers  
Dealing with Diversity  
Family Communication  
Living Literature  
Schools and Society  
Women and Social Action

Annenberg/CPB, producers of the following courses currently distributed by PBS:  
Africans  
Against All Odds: Inside Statistics  
American Cinema  
American Passages  
Art of the Western World  
Biography of America I and II  
Bridging World History  
College Algebra

Connect with English  
Constitution, The  
Death: A Personal Understanding  
Democracy in America  
Destinos I and II  
Discovering Psychology: Updated Edition  
Earth Revealed, The  
Economics U\$A  
English Composition  
Ethics in America  
Exploring the World of Music  
Fokus Deutsch  
For All Practical Purposes  
French in Action I and II  
Growing Old in a New Age  
Human Geography  
Inside the Global Economy  
Literary Visions  
Mechanical Universe and Beyond, The  
News Writing  
Out of the Past  
Planet Earth  
Power of Place: Geography for the 21st Century  
Rural Communities  
Seasons of Life  
Unseen Life on Earth  
Voices and Vision  
World of Abnormal Psychology, The  
World of Art, A  
World of Chemistry, The  
Western Tradition I and II  
Whole Child, The

Dallas Telelearning, producers of the following courses currently distributed by PBS:  
Accounting in Action  
America in Perspective  
Choices and Change  
Exploring Society  
It's Strictly Business  
Journey to Health  
Nutrition Pathways  
Shaping America  
Transforming America  
Voices in Democracy  
A Writer's Exchange



If you have any questions regarding telecourse/teleweb licensing, please contact Jalaine Gross at 919-807-7109 or [grossj@nccommunitycolleges.edu](mailto:grossj@nccommunitycolleges.edu).

## System-wide Distance Learning Curriculum Highlights

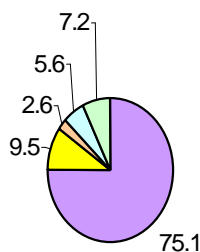
Dr. Paula Berardinelli, NCCCS

This edition reports the most complete distance learning academic year (fall, spring, summer) information from the NCCCS Data Warehouse. As shown in Figure 1, the majority (75%) of distance learning enrollment (Academic Year 2003-2004)<sup>(1)</sup> is offered via online courses. The remaining 25 percent include all other methods of distance learning. Our focus in this edition is to highlight the efforts being made by faculty and distance learning professionals across the state to honor the diverse learning styles of all students served through the community colleges.

teleweb, two-way video, and telecourse distance learning methods. All data presented in these tables has been taken from the NCCCS data warehouse<sup>(2)</sup>. A complete report of distance learning data for the 2004-2005 Academic Year will be published in the fall edition of this newsletter, pending release from the NCCCS Data Warehouse.

**Figure 1.**

**Distribution of Distance Learning Methods**



Online	Telecourse	Teleweb	2-way Video	Other
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Tables 1, 2, and 3 show the curriculum course enrollments (duplicated headcount) for the 2003-2004 Academic Year. The tables are arranged in descending order (on the following page) by percentage of enrollment from the



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Table 1 shows that the system-wide average for teleweb enrollment is 65.53 students. The range of enrollment is between 0 and 709 students. Thirty colleges reported using this distance delivery method.

Table 2 shows that the system-wide average for two-way video (NCIH – North Carolina Information Highway) enrollment is 154 students. The range of enrollment is between 0 and 963 students. Thirty-one colleges reported using this distance delivery method.

**Table 1. Teleweb Course Information <sup>(1)(2)</sup>**

College	Total # Teleweb Enrollments	Total FTE Teleweb	Total # DL Enrollments	Percentage of DL Enrollment via Teleweb
Bladen CC	344	48	1,681	20.46
McDowell TCC	24	0	118	20.34
Wilson TCC	709	0	3,994	17.75
Central Carolina CC	560	0	5,598	10.00
Tri-County CC	15	0	166	9.04
Lenoir CC	149	6	1,823	8.17
Catawba Valley CC	524	0	6,834	7.67
Rowan-Cabarrus CC	209	0	2,910	7.18
Johnston CC	106	0	1,524	6.96
Southwestern CC	124	13	2,337	5.31
Caldwell CC & TI	164	13	3,164	5.18
Rockingham CC	79	0	1,712	4.61
Surry CC	60	6	1,572	3.82
Central Piedmont CC	433	20	12,493	3.47
Haywood CC	68	0	2,116	3.21
Gaston College	82	0	3,174	2.58
South Piedmont CC	37	0	1,474	2.51
Wayne CC	30	0	1,985	1.51
Davidson County CC	38	8	2,532	1.50
Western Piedmont CC	53	0	4,242	1.25
Halifax CC	23	2	1,936	1.19
Wake TCC	48	0	5,658	0.85
Wilkes CC	21	0	2,590	0.81
Southeastern CC	22	3	2,767	0.80
Cape Fear CC	16	0	2,168	0.74
Stanly CC	24	0	3,429	0.70
Brunswick CC	6	0	877	0.68
Piedmont CC	19	0	3,496	0.54
Fayetteville TCC	69	0	15,231	0.45
Forsyth TCC	23	0	8,566	0.27
Durham TCC	0	2	2,646	0.00
Craven CC	0	0	3,089	0.00
Guilford TCC	0	0	5,013	0.00
Edgecombe CC	0	0	1,072	0.00
College of The Albemarle	0	0	4,014	0.00
Mayland CC	0	0	918	0.00
James Sprunt CC	0	0	397	0.00
Roanoke-Chowan CC	0	0	766	0.00
Isothermal CC	0	0	868	0.00
Beaufort County CC	0	0	1,416	0.00
Martin CC	0	0	1,044	0.00
Asheville-Buncombe TCC	0	0	3,672	0.00
Sandhills CC	0	0	1,505	0.00
Alamance CC	0	0	1,705	0.00
Blue Ridge CC	0	0	1,091	0.00
Carteret CC	0	0	1,639	0.00
Cleveland CC	0	0	1,041	0.00
Coastal Carolina CC	0	0	2,698	0.00
Mitchell CC	0	0	585	0.00
Montgomery CC	0	0	1,044	0.00
Nash CC	0	0	1,710	0.00
Pamlico CC	0	0	147	0.00
Pitt CC	0	0	5,935	0.00
Randolph CC	0	0	2,857	0.00
Richmond CC	0	0	757	0.00
Robeson CC	0	0	177	0.00
Sampson CC	0	0	1,328	0.00
Vance-Granville CC	0	0	1,263	0.00
<b>NCCCS System Totals</b>	<b>3,735</b>	<b>73</b>	<b>156,883</b>	
<b>NCCCS System Averages</b>	<b>65.53</b>	<b>1.28</b>	<b>2752.33</b>	<b>2.38</b>

**Table 2. Two-way Video (NCIH) Course Information <sup>(1)(2)</sup>**

College	Total # 2-Way Video Enrollments	Total FTE 2-Way Video	Total # DL Enrollments	Percentage of DL Enrollment via 2-Way Video
Mayland CC	379	37	918	41.29
James Sprunt CC	159	16	397	40.05
Wilkes CC	963	94	2,590	37.18
Southwestern CC	820	78	2,337	35.09
Beaufort County CC	474	44	1,416	33.47
Montgomery CC	327	31	1,044	31.32
Sampson CC	318	28	1,328	23.95
Blue Ridge CC	233	24	1,091	21.36
Piedmont CC	733	71	3,496	20.97
Surry CC	273	26	1,572	17.37
Stanly CC	472	45	3,429	13.76
Rowan-Cabarrus CC	362	36	2,910	12.44
College of The Albemarle	459	42	4,014	11.43
Johnston CC	168	17	1,524	11.02
Edgecombe CC	100	10	1,072	9.33
Asheville-Buncombe TCC	340	31	3,672	9.26
Catawba Valley CC	590	55	6,834	8.63
Caldwell CC & TI	248	27	3,164	7.84
Gaston College	190	18	3,174	5.99
Forsyth TCC	480	43	8,566	5.60
Martin CC	56	5	1,044	5.36
Bladen CC	71	7	1,681	4.22
Tri-County CC	5	1	166	3.01
Central Carolina CC	166	15	5,598	2.97
Southeastern CC	80	8	2,767	2.89
Halifax CC	44	4	1,936	2.27
Fayetteville TCC	334	38	15,231	2.19
Brunswick CC	18	2	877	2.05
Lenoir CC	10	1	1,823	0.55
Pitt CC	25	5	5,935	0.42
Guilford TCC	20	2	5,013	0.40
McDowell TCC	0	0	118	0.00
Pamlico CC	0	0	147	0.00
Robeson CC	0	0	177	0.00
Mitchell CC	0	0	585	0.00
Richmond CC	0	0	757	0.00
Roanoke-Chowan CC	0	0	766	0.00
Isothermal CC	0	0	868	0.00
Cleveland CC	0	0	1,041	0.00
Vance-Granville CC	0	0	1,263	0.00
South Piedmont CC	0	0	1,474	0.00
Sandhills CC	0	0	1,505	0.00
Carteret CC	0	0	1,639	0.00
Alamance CC	0	0	1,705	0.00
Nash CC	0	0	1,710	0.00
Rockingham CC	0	0	1,712	0.00
Wayne CC	0	0	1,985	0.00
Haywood CC	0	0	2,116	0.00
Cape Fear CC	0	0	2,168	0.00
Davidson County CC	0	0	2,532	0.00
Durham TCC	0	0	2,646	0.00
Coastal Carolina CC	0	0	2,698	0.00
Randolph CC	0	0	2,857	0.00
Craven CC	0	0	3,089	0.00
Wilson TCC	0	0	3,994	0.00
Western Piedmont CC	0	0	4,242	0.00
Wake TCC	0	0	5,658	0.00
Central Piedmont CC	0	0	12,493	0.00
<b>NCCCS System Totals</b>	<b>8,917</b>	<b>857</b>	<b>158,564</b>	
<b>NCCCS System Averages</b>	<b>154</b>	<b>15</b>	<b>2,734</b>	<b>5.63</b>



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Table 3 shows that the system-wide average for telecourse enrollment is 261 students. The range of enrollment is between 0 and 2,593 students. Forty-two colleges reported using this distance delivery method.

**Table 3. Telecourse Information <sup>(1)(2)</sup>**

College	Total # Telecourse Enrollments	Total # TE Telecourse	Total # DL Enrollments	Percentage of DL Enrollment Via Telecourse
Wilson TCC	2,194	209	3,994	54.93
Central Carolina CC	2,593	257	5,598	46.32
Rowan-Cabarrus CC	860	81	2,910	29.55
Catawba Valley CC	1,864	181	6,834	27.28
Rockingham CC	401	48	1,712	23.42
James Sprunt CC	82	8	397	20.65
McDowell TCC	24	3	118	20.34
Brunswick CC	166	16	877	18.93
Lenoir CC	295	22	1,823	16.18
Johnston CC	234	23	1,524	15.35
Durham TCC	389	37	2,646	14.70
Bladen CC	244	19	1,681	14.52
Cape Fear CC	311	29	2,168	14.35
South Piedmont CC	203	20	1,474	13.77
Central Piedmont CC	1,470	139	12,493	11.77
Wake TCC	659	72	5,658	11.65
Gaston College	332	32	3,174	10.46
Mayland CC	90	10	918	9.80
Surry CC	145	14	1,572	9.22
Edgecombe CC	97	9	1,072	9.05
Tri-County CC	15	1	166	9.04
Haywood CC	153	14	2,116	7.23
Stanly CC	233	21	3,429	6.79
Caldwell CC & TI	200	18	3,164	6.32
Piedmont CC	191	16	3,496	5.46
Roanoke-Chowan CC	40	4	766	5.22
Craven CC	154	14	3,089	4.99
Davidson County CC	124	12	2,532	4.90
Forsyth TCC	303	30	8,566	3.54
Western Piedmont CC	144	22	4,242	3.39
Fayetteville TCC	496	44	15,231	3.26
Isothermal CC	25	2	868	2.88
Wilkes CC	61	6	2,590	2.36
College of The Albemarle	91	9	4,014	2.27
Guilford TCC	109	10	5,013	2.17
Wayne CC	42	4	1,985	2.12
Martin CC	18	2	1,044	1.72
Beaufort County CC	19	2	1,416	1.34
Halifax CC	24	2	1,936	1.24
Sandhills CC	13	1	1,505	0.86
Southeastern CC	11	1	2,767	0.40
Asheville-Buncombe TCC	14	1	3,672	0.38
Alamance CC	0	0	1,705	0.00
Blue Ridge CC	0	0	1,091	0.00
Carteret CC	0	0	1,639	0.00
Cleveland CC	0	0	1,041	0.00
Coastal Carolina CC	0	0	2,698	0.00
Mitchell CC	0	0	585	0.00
Montgomery CC	0	0	1,044	0.00
Nash CC	0	0	1,710	0.00
Pamlico CC	0	0	147	0.00
Pitt CC	0	0	5,935	0.00
Randolph CC	0	0	2,857	0.00
Richmond CC	0	0	757	0.00
Robeson CC	0	0	177	0.00
Sampson CC	0	0	1,328	0.00
Southwestern CC	0	0	2,337	0.00
Vance-Granville CC	0	0	1,263	0.00
<b>NCCCS System Totals</b>	<b>15,133</b>	<b>1,466</b>	<b>158,564</b>	
<b>NCCCS System Averages</b>	<b>261</b>	<b>25</b>	<b>2,734</b>	<b>9.55</b>

## A note about data integrity....

Data integrity is vital to the Virtual Learning Community (VLC) and distance learning overall. For this reason, all data published in the VLC newsletter or used by the VLC is generated from the NCCCS data warehouse.

The VLC has been made aware of cases where the data we publish does not match the data maintained at the college. If that is the situation with your college, as reported in this newsletter, please contact the Skilled Knowledge Worker on your campus.

As a proactive step, review the Distance Learning Codes and the Instructional Class Report (ICR) with the Skilled Knowledge Worker on your campus before submitting it to the data warehouse. Use this link, <http://www.ncccs.cc.nc.us/reports/statistical/duedates.htm>, to view the schedule of reports for the data warehouse. The next Instructional Class Reports are due June 6.

## UNC-TV's Upcoming Telecourse Broadcast Schedules

Dr. Ron Plummer, UNC-TV and Ms. Jalaine Gross, NCCCS

Colleges have more options than ever to provide students with access to telecourse content. Some of these options include broadcasts on public television stations and college cable stations, videotapes, CDs, DVDs, and digitizing and video streaming. With all of these choices available, many of our community colleges and students continue to rely on UNC-TV to broadcast telecourses. UNC-TV provides each college an opportunity to vote, on an annual basis, for telecourses they will broadcast. The NCCCS sincerely thanks UNC-TV for this great partnership and giving our colleges a voice in telecourse broadcast decisions! UNC-TV has



published their Broadcast Schedule for the next three semesters. You can find these schedules on UNC-TV's website at <http://www.unctv.org/education/tvforlearning/telecourse/index.htm>. If you have any questions regarding UNC-TV and telecourse broadcasting, please contact Dr. Ron Plummer at 919-549-7163 or [rplummer@unctv.org](mailto:rplummer@unctv.org). If you have any questions regarding telecourse/teleweb content or licensing, please contact Jalaine Gross at 919-807-7109 or [grossj@nccommunitycolleges.edu](mailto:grossj@nccommunitycolleges.edu).

## Teaching Tips for Teleweb, Telecourses and Two-way Video (NCIH) Courses

Celia Hurley and Jon Matthews, Central Carolina CC

Ken Elliott, Catawba Valley CC

Ann Russell, Bladen CC

Alice Crisp, Blue Ridge CC

Libbie McPhaul-Moore, Piedmont CC

Jon Wilmesherr and Richard Linville, Mayland CC

Don Ford, McDowell Technical CC

Bud Mayes, Tom Caudill, and Nolan Belk, Wilkes CC

Dennis Keough, Southwestern CC

Heather Lanier, James Sprunt CC

Penny Sermons, Beaufort County CC

Colleges with at least 20% of their distance learning enrollment within telecourse, teleweb, and two-way video (NCIH - North Carolina Information Highway) were invited to respond to the following questions:

1. How did you get started teaching with these methods?
2. What do you recommend to faculty who may want to teach with these technologies?
3. What do you recommend the college have in place to support students who are taking classes offered by these methods?

4. What other comments would you like to share?

### **VLC: How did you get started teaching with these methods?**

**Catawba Valley:** "Two-way video (NCIH) - These courses normally require a request from another institution. 80% of what we schedule and send is to our local high school populations. The schools make a request for transferable college credit courses and then we see if we have those classes offered as regular seat classes. We then match the time to a timeslot.

A department, usually in conjunction with another institution generates curriculum offerings. The collaboration comes when we have no funds to hire faculty to test a new curriculum. We also reciprocate this arrangement for other institutions.

Telecourses- I receive materials on a regular basis from vendors on new course series. I pass those along to the departments for review. The departments determine if they can use the materials for new offerings or to replace older courses.

With both of these delivery methods, the faculty has a brief orientation. They are instructed on good distance education teaching practices that are interactive. When possible, we also encourage face-to-face meetings. For both, the Telecommunications Staff is available during the first two weeks of the class to acclimate the teachers to this medium of teaching.

Teleweb courses- Internet courses go through a process started by Chris Smart, our faculty development engineer. Faculty must submit a series of forms and complete approval processes. This ensures that the format matches existing courses and established standards. Faculty is required to complete the



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NCCCS Principles and Techniques in Online Instruction (PTOI) web .”

**Bladen:** “BCC started its distance education program in the late 90’s under the leadership of President Darrell Page and visionary influence of instructors David Perry and Sherry Garner. Initially, BCC offered three telecourses and two NCIH classes. None of them was very successful. Then, Dr. Page asked for a real commitment to embrace these emerging delivery formats and make them work for student success. An examination of the whole distance learning arena enabled us to develop a philosophy for distance education that still guides all decisions.”

**Blue Ridge:** “BRCC is a relatively ‘late bloomer’ in the videoconferencing arena compared to other colleges in our system. Our foresighted President, Dr. David W. Sink, Jr., conceived a distance learning room in the new Allied Health and Human Services building which was completed in 1997. In 1999, our college subsequently obtained two grants. One from the James H. Cummings Foundation and one from the Janirve Foundation. These grants provided funds for our college to equip a state-of-the-art distance learning classroom.

The initial plan to provide training and coursework for the increasing workforce needs in Allied Health has now exploded to other areas of the college. By the fall of 2000, not only did we have a completed NCIH classroom, we also had a ‘gung-ho’ instructor, Ann Condrey. She had been approached by colleges in the eastern part of the state to offer the Interpreter Education Program by videoconference. Our forward-thinking President had hired a new Dean for Technology, David Hutto. He had successfully managed a public broadcasting and distance learning facility at Mississippi State University for 17 years. Soon after arriving, Dean Hutto organized an instructional support team. This

team included an applied technology counselor, a media specialist with a television background, and an instructional designer to work with our Instructional Dean, Earl Medlin. This team was charged with the responsibility to take the President’s vision to the ‘big screen.’ While we struggled with the paperwork pertaining to instructional service agreements, the classroom never missed a beat! We brought in NCIH trainers and one of the ‘old timers’ who established the Information Highway with the Prison System. Dean Hutto had the instructor to complete ‘run-down’ sheets for broadcasting her class. She was knowledgeable about what to wear, how to speak, and she was a natural performer! That first class was successful with almost as many people in the control room as in the classroom. We also partnered with UNC Asheville and Robeson Community College for sign language students. One unforgettable highlight was the night we held our Student Award Ceremony. The ceremony took place in our electronic teaching auditorium and was connected to NCIH sites through our DL room to Robeson CC.

We enhanced our interactive video delivery by adding a special effects generator to superimpose the instructor over graphics generated by PowerPoint. This was particularly important for the ASL classes. Students at far sites could see the instructor as well as the text supporting major educational objectives.

After the class of 2000 graduated, we began a new partnership with Fayetteville Technical Community College in teaching American Sign Language (ASL). This program has been offered continuously since its beginning. Our college is currently working with the Department of Public Instruction to plan other ways to connect with public school interpreters who must obtain interpreter certification and registration.

In 2004, Dean Hutto worked with our Dean of Instruction and the administrators of our local



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school board to establish video classrooms at our county high schools. We have offered a range of college transfer classes at the high schools to include Music Appreciation (complete with piano and round singing), Public Speaking, and Introduction to Education. We have had a very active partnership with Western Carolina University (WCU). WCU uses our classroom to offer two cohorts: a Bachelor's degree in Birth to Kindergarten and Elementary Education, and Business Administration/Entrepreneurship. By the fall of 2004, we were running approximately 46 hours per week through our primary DL room. We have also added a second interactive video classroom at the Flat Rock Campus and a remote video classroom at our branch center in Brevard. Currently, the college is planning a new Technology Education and Development Center that will house the majority of the colleges IT Labs, two additional interactive video classrooms, a TV Studio, audio production studio, and broadband VR training and development environment."

**Piedmont:** "In 1998, the administration and academic deans of PCC determined the need for more courses to be offered at the Caswell County campus. Students needed easier access to courses required for degree completion. Videoconferencing became the most economical way to support PCC's programs on the Caswell campus.

We started with telecourses years ago and still find them useful in some situations. In fact, we are planning on developing two telecourses this summer (ENG 101 and MAT 101) that will be used primarily with our prison programs since they do not have Internet or ITV access."

**Mayland:** "Our college serves three mountain counties - Mitchell, Avery, and Yancey, hence the name Mayland. Interactive television (ITV) classrooms in all three counties allow us to

offer the same classes in three places at the same time. This helps reduce students' travel times."

**McDowell Technical:** "MTCC began offering distance education in 1992 with one telecourse (BUS 110) of seven students. Since that time, our distance education enrollment has grown substantially and we offer a wide variety of classes in various formats."

**Wilkes:** "Telecourses: The information below is my personal history. Other instructors were utilizing telecourses in their classes. Telecourses were delivered by broadcast (if the student could receive a signal) and tape access. Keep in mind that this is before cable or satellite services were available in the outer reaches of our three-county service area. I started teaching telecourses back in the earliest days of that activity. We offered HIS 121TE and HIS 122TE in three sections per quarter. Since our students in the remote sections of Wilkes, Ashe, or Alleghany counties were unable to receive a strong TV signal from a PBS station, we offered courses on tape at each of our three campuses.

NCIH: In the late 1990's, I was approached by our Continuing Education people to consult with Lowe's Companies (through their 'Lowe's University') to train their executives in communication skills, both for public speaking and televised presentations. Lowe's, at that time, was expanding rapidly across the nation and had established an extensive satellite telecourse and live training/instructional delivery system. They needed help in 'training their trainers' in how to effectively present themselves and their content utilizing a live televised format. In addition to teaching history, I had taught theater for over 30 years (both educational and professional) and had a background that both WCC and Lowe's found satisfactory. I conducted the training when Lowe's was upgrading their corporate system to what was comparable to the NCIH.



## Expanding the Virtual Learning Community



When our first cyber classroom came online, I was asked to train our instructors in that mode of instruction. I conducted the training at various time periods prior to each semester until a cadre of experienced instructors developed. Tom Caudill, Associate Dean, Instruction Services, has provided below a detailed history of the development of our cyber classroom instruction:

- 1998 summer - Established the cyber classroom in the James Larkin Pearson Library Building.
- 1998 fall - Partnered with Alleghany High School for the first classes. I think that we had one or two classes in the fall.
- 1999 spring - With just Alleghany as the remote site we offered three or four classes.
- 1999 spring and summer - We began working with Wilkes County schools to add classes as electives for advanced students. West Wilkes was the first school with a room and then East Wilkes. West Wilkes actually had a room before WCC, but they did not use it. Classes were planned for the following school year.
- 2000 summer - North Wilkes and Ashe County High School NCIH rooms were added and classes were established for the high schools.
- 2001 summer - Wilkes Central NCIH was added. Classes were offered that went to six remote sites, which are two more than recommended.
- 2002 summer - National Guard room was created at WCC main campus. This was originally supposed to give us the ability to deliver/receive two NCIH courses at the same time. However, in the fall of 2002, we were able to deliver one class from the National Guard room.
- 2004 summer - Moved the cyber classroom from the JLP Library to room 210.

Our enrollment has continued to grow because...

- Student needs are expanding at an ever-increasing number of locations.
- Our administration recognizes the need and provides the tools and technical support to reach our students.
- Instructors (both full-time and adjunct) are stepping forward to teach using this format.
- We have been working with our local public secondary schools, National Guard, and industry to meet their needs.

Teleweb: We have only offered one teleweb course, HIS 167TW The Vietnam War. I teach this every semester. It is not broadcast, so we provide a set of tapes at each of our three campuses.”

**James Sprunt:** “Telecourses have been offered at JSCC since before I began working in Distance Learning. I spoke with our Dean of Curriculum Services. Her predecessor was always a proponent of technology and distance learning. Telecourses are a relatively easy way to provide distance learning opportunities and we feel that this factored into the decision to offer telecourses.

We began video conferencing about five years ago. With the construction of a new building, the college added our first video conferencing classroom. Since we are a relatively small, rural college, we collaborated with other community colleges and universities. We have accomplished our goal to provide citizens in our area with greater educational opportunities. We partnered with UNCW, ECU, our local public schools, and several community colleges to share courses and programs.

The numbers of online courses have been slower to grow. The amount of preparation and instructor time deters many faculty members from choosing this method of delivery. Through education and training, our faculty is beginning to see the many advantages of supplementing



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traditional courses. More faculty members are beginning to offer hybrid courses as well. The courses developed by the VLC have been a wonderful resource for our institution.”

**Southwestern:** “SCC began operating ‘Community-Link’ ITV network in 1995. ‘Community-Link’ connects seven local high schools, Western Carolina University, and four SCC campus centers via broadband analog fiber. This past spring ‘Community-Link’ delivered 20-college level classes and served 276 students in a three county area.

During summer 2005, SCC will begin re-engineering its ITV system to a digital fiber network. The new ITV sites will be capable of Internet Protocol (IP) transmission on an H.323 standard. These newly deployed digital technologies will help the college to continue and improve its commitment to deliver quality college courses to a geographically diverse population.”

**Beaufort County:** “BCCC became involved with video conferencing approximately ten years ago. The State Information Processing Services (SIPS) conducted tests with a new and emerging network that became known as the North Carolina Information Highway (NCIH). Manteo High School, one of the four test sites in the state, was our first exposure to videoconferencing. The success of the early test sites proved that teleconferencing technology would be a suitable method of addressing BCCC’s distance learning needs.

The college received an Economic Development Administration (EDA) grant that enabled us to install teleconferencing classrooms in locations throughout our service area. These sites include Columbia High School, Creswell High School, Mattamuskeet School, Ocracoke School, Plymouth High School, Washington High School, and Hyde Correctional Center. All sites jumped in with

‘both feet’ and adapted to the ‘learn as you go’ scenario. Community colleges paved the way for North Carolina to become a leader in the field of educational videoconferencing.

Charting new territory required the BCCC NCIH faculty and the technical staff to explore, invent, and develop every aspect of teaching via the television. Even though there have been some bumpy rides along the Information Super Highway, the NCIH remains a constant and reliable method of teaching at a distance. BCCC’s enrollment for NCIH classes averages about 240 students per semester. The enrollment during some semesters has been above 300. BCCC continues to deploy new distance learning technologies including Internet classes, web enhanced, teleweb, telecourses, and hybrids.

In 2003, BCCC pioneered an innovative method of delivering distance instruction. Funding from the e-NC Authority made it possible for BCCC to design and implement the Mobile Computer Lab (MCL), a wireless ‘self-contained’ classroom on wheels. The van, outfitted with a server, laptops, and a satellite for broadband Internet connectivity, makes it possible to establish a classroom almost anywhere. BCCC is able to offer options for learning that never existed prior to the development of the MCL. Delivering learning to the doorstep provides students in rural areas of eastern NC a opportunity to use advanced technology to further their education.”

### **VLC: What do you recommend to faculty who may want to teach with these technologies?**

**Central Carolina:** “We have a variety of support for the faculty, but many now prefer online delivery. Faculty support include:

- Guides for faculty advisors use throughout the advising and registration period
- Scheduling of rooms and equipment for all on-site orientations



- Coordination of on-site testing
- Distance Education Faculty Guide (a 26-page resource with policies, procedures, forms, etc.)
- Materials and templates for packets distributed by instructors during orientation sessions.”

**Bladen:** “Faculty need to increase their interaction skills through alternative mediums. Students report more difficulty understanding the technology than understanding the course materials. It is a methods issue, not a materials issue.

Another key to distance success is faculty commitment and involvement. BCC has been blessed with creative, willing faculty. Our instructors have been VLC course developers and editors since the VLC’s inception. We have found that by networking with other developers, we can learn each other’s best practices. Training and on-site support for faculty is a must. Our school has offered faculty small incentives for course development and for implementing new distance courses and methods. We also have learned that good support materials must be developed for telecourses the same as for face-to-face classes. Course packets are given to students at the beginning of the semester. These packets help reassure anxious students about course expectations. It also increases retention by providing students know the who, what, when, and where of the course.

Faculty who teach these courses need to have proper instruction, guidelines, technical training, and support. Distance teaching is time consuming, demanding, and very rewarding. Anyone considering teaching a distance course of any kind should find a mentor who is already teaching in that delivery format and ‘apprentice’ with that instructor. We encourage mentoring among faculty for new distance instructors.”

**Blue Ridge:** “In regard to interactive video instruction, we recommend that no one walk into the ITV classroom without training. The best-prepared faculty members observe the classroom in action before taking over the helm. ‘Newbies’ should seek advice of the seasoned ITV instructors. ITV instructors should always be prepared for contingencies if the technology malfunctions. Strange things may happen such as a construction outfit could suddenly dig up your T-1 line. Class preparation should include a group exercise or some other type of assignment, should the technology fail, ensuring no loss of instructional time. The wise use of multimedia in the classroom such as desktop Internet connections support learning more than plain text on a PowerPoint. ITV faculty preparation should include online capability to overcome the logistical challenges of assignments, quizzes, and collaboration.”

**Piedmont:** “Faculty should be prepared to try new methods and strategies that will actively involve the remote students. Instruction must incorporate a variety of activities for all sites, including small group activities, student presentations, guest speakers, and question-answer sessions. Using TV for a sole delivery method can become very boring for students. Brief lectures blended with other activities and visual support can work well. Unless a strong effort is made by the instructor, students at the remote site may remain uninvolved. Instructors must ask more questions to ensure that students, especially the remote students, understand the course material.

The faculty must be willing to learn how to use the equipment. Thirty minute to sixty minute training sessions are usually sufficient to give faculty a ‘hands on’ experience. Some of the operations an instructor might need to perform are:

- Turning on the monitors
- Controlling camera angle and focus



- Adjusting the volume
- Switching to and from the document camera
- Utilizing a laptop to display multimedia presentations
- Accessing the Internet
- Video taping.”

**Mayland:** “ITV and telecourse instructors must be extremely organized. Much of their time will be spent on delivering supporting materials and making sure that they have adequate communication with their students. Therefore, the content for the courses must be complete and ready to go before the course begins.”

**McDowell Technical:** “It is extremely important that faculty be properly trained in delivering instruction via distance education. They also need a backup plan (paper handouts) or other means of delivering the material for any given day since technology may not work properly 100% of the time.”

**Wilkes:** “Faculty who may want to teach with these technologies should consider:

- Having an honest desire to instruct via one of these formats
- Recognizing the need for the delivery method
- Being open to learn to deliver distance instruction
- Recognizing that these instructional formats meet the needs of an ever-changing student population
- Setting aside personal preferences to blend existing technology and online pedagogy.
- Translating their subject matter and their instructional personae into effective instruction.”

**Southwestern:** “Teaching over an ITV network is similar to a traditional class in that students and the instructor assemble at a predetermined location in real-time. The main difference is that students and the instructor

are separated by distance. Web enhancement and e-mail help with the distribution of hard-copy class content. For new ITV instructors, an orientation to the ITV room equipment is essential. I also encourage a potential ITV instructor to observe a class conducted to get an idea of the common misconceptions and potential pitfalls intrinsic to the technology.”

**James Sprunt:** “Talk with other faculty members and distance learning coordinators about the delivery method. Make an informed decision as to whether or not this method is suited for your teaching style. If possible, I recommend experiencing the teaching method first-hand (sitting in a videoconferencing class, login into fellow instructor’s online courses as a student, etc.). It is important that faculty understand that some delivery methods may require more training and preparation than others. For example, it takes much more training and preparation to teach an online course versus a videoconferencing course. They should also realize that alternative methods of delivery do not necessarily mean easier or less work, which is the same advice we give our students!”

**Beaufort County:** “Teaching with technology is not for everyone. All instructors are not comfortable with ‘cutting-edge’ methods of teaching. However, combining the lecture method with new technology creates many options for meeting diverse learning styles. Students of the younger generation have grown up with technology and are comfortable utilizing it in the learning process.

Teaching via the NCIH requires that the instructor have some level of animation and a high level of interest in this delivery method. Practicing or becoming familiar with the environment before teaching can make a huge difference. The ‘talking head’ method is ineffective and boring. Students expect instructors to be well prepared and organized. Flexibility is critical when working with



technology, as it is sometimes necessary to resort to an alternative plan. Quality asynchronous distance learning involves interaction to ensure that the students at remote sites are truly engaged. Instructors should keep abreast of new technology and incorporate new ideas into teaching.”

### **VLC: What do you recommend the college have in place to support students who are taking classes offered by these methods?**

**Central Carolina:** “Student support should include:

- DVDs for distribution when possible (if distributor/producer allows it)
- Extended hours for general on-site testing (spring and fall: 2 days, 9:30 a.m. - 9 p.m.)
- Multiple avenues for submitting assignments: electronically, postal mail, campus drop off
- Self-assessment readiness quiz to assist in determining if distance is appropriate for the student
- a distance education website ([www.cccc.edu](http://www.cccc.edu))
- Postcard reminders of upcoming orientations to early registrants
- Free checkout of cassettes/DVDs for the entire semester
- Mail out of cassettes/DVDs for those outside the service area
- A dedicated Distance Education Counselor for student assistance.”

**Catawba Valley:** “Student support should include some type of informational process as to what a DE course entails. DE students must be aware that they must acquire a new set of learning skills to avoid being discouraged.”

**Bladen:** “For the insecure student who needs a physical presence, telecourses provide security. The taped lectures and lessons can be viewed repeatedly and represent a physical presence for the student. Teleweb courses are

a way for the student who is afraid of totally online instruction to have the best of both delivery formats. Teleweb courses also provide instructors a means to include discussion in a telecourse. Online classes fit the needs of independent learners, geographically dispersed, night owls, and workers who absolutely cannot keep a normal schedule. Our NCIH classes enable us to share instructors among schools. Colleges benefit by being able to provide more course offerings. In distance delivery methods, as in life, it is never good to place all the eggs in one basket.

Distance students must have the same services and support available to them as traditional students. These services include library access, counseling, tutoring, etc. Our students automatically receive school email accounts when they enroll. We use these accounts for all interaction between students and faculty and among students. The school email system is virus free and has had limited problems since its inception. Each student receives access to NC LIVE (NC Libraries for Virtual Education - searchable collections of full-text magazines, newspapers, journal articles, and electronic books) for library services. Telecourse tapes are checked out through the library for the entire semester. We purchase tape sets from ACT/RMI to ensure timely availability and professional quality. We also have tape sets in the library for on-campus viewing. We will be switching some courses to DVD or CD-ROM in the next school year. Students may receive assistance in email and Blackboard from library personnel during school hours. We have an online technical assistance tutor who enters all Blackboard classes to assist students with technical and navigational problems. We ask instructors to build in the ‘Course Questions’ forum. If a student needs help with course navigation or technical aspects of the course, the tutor, the instructor, or another student can answer the question and the entire class benefits. It is school policy that all student



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emails are answered within 48 hours. In reality, most are answered within 24 hours.”

**Blue Ridge:** “Students taking classes by distance often feel disadvantaged and disconnected watching a television screen. We can dispel that by adequately preparing faculty to connect with the DL student in the same manner and frequency as their traditional counterpart. Microphones are often muted at remote locations and sometimes it takes extra encouragement by faculty to get student participation. However, once the climate is set, students forget their fears and begin community building that extends beyond instruction. A carefully planned questioning strategy is also very important. One must plan for interaction and intentionally guide the process.”

**Piedmont:** “Instructors should provide students with an orientation to the course and classroom the very first day of class. Students must be forewarned that any unnecessary noise or activity can detract from the quality of the course. The Distance Learning Coordinator is accessible to hear comments and concerns and there is a support person (DL Technician) constantly available in the classroom. Students have access to all online resources, including a virtual pamphlet collection.”

**Mayland:** “For telecourses, students and faculty need to have mechanisms in place for both exchanging documents and keeping in touch. In addition to our Campus Cruiser portal, we also have drop boxes for each telecourse in the Learning Resources Center (LRC) so students can leave their work and pick up graded assignments. The LRC also offers proctored tests when requested by the faculty.

ITV instructors need special training relating to the medium before they begin teaching. NCIH

regional coordinators can provide a wealth of materials and assistance in this area. We believe that every ITV room must have a trained distance education technician available during all classes to assist the instructor and/or students as needed.”

**McDowell Technical:** “Colleges should have an informative orientation session for all distance education students. They should be required to attend orientation even though they may have prior exposure to distance learning courses. In some cases, this is the entry date when the student meets with the instructor.”

**Wilkes:** “Student support should include:

- A system to help students adjust to e-learning
- Instructors willing to teach in these formats
- Technology and tools to deliver the instruction
- A system for evaluating the instruction
- Professional development in each format
- An administration that is willing to provide a supportive learning environment.”

**Southwestern:** “Students who are enrolled in an ITV class should have an instructor accessible e-mail address. I also recommend that all ITV classes be supported with a class website on their institution's Blackboard server.”

**James Sprunt:** “Ideally, the college should have a department or helpdesk dedicated to support distance learning students. However, those of us at smaller institutions are not able to provide this service. It is important to have people who are knowledgeable about distance learning and can address student concerns and questions. Instructors are the first point of contact for students, so it is important to make sure they have the information needed to guide students to the correct place for support. Communication is key. Often times, a student's first contact is with those not directly involved with distance learning. It is imperative that all



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faculty and staff understand what distance learning is and what the college provides. We stress to our faculty advisors the importance of making sure their advisees understand the type of course in which they are enrolling and the needed skills. We depend on them to make sure that students enrolling in distance learning courses are knowledgeable about the delivery method and feel they are capable of succeeding in these types of courses.”

**Beaufort County:** “We recommend that all services provided to students in traditional classes are available to distance learners including library services, advising, financial aid, tutoring, email, etc. It may be necessary to develop new methods of delivering these resources. For example, BCCC students enrolled in NCIH and other types of distance learning classes have remote access to NCLIVE with a password acquired from the library. Financial and administrative support is imperative to maintain and sustain quality instruction and delivery.”

**VLC: What other comments would you like to share?**

**Catawba Valley:** “Students and faculty should be prepared for what each medium can offer for them. Convenience is the main attraction for students, but that comes at a price.”

**Bladen:** “A balanced variety of delivery methods, committed and trained faculty, and adequate student support are key elements in successful distance programs, but they are not everything. Perhaps the most useful and essential key is flexibility. All segments of a college--the administration, the staff, the faculty, and the students--have to be willing to reach out, to try new things, to adapt, and to celebrate diversity. If any of these segments are rigid and unwilling to embrace fast-paced change, distance education will not prosper. Distance learning is truly ‘a field of dreams’

requiring us to constantly improve what already exists and to invent what we only dreamed about yesterday.”

**Blue Ridge:** “At BRCC, we look forward to the upcoming developments for Interactive Video instruction. We are grateful for the strong leadership of the Virtual Learning Community and the effort that has been expended by all members. We can say with assurance that student recipients of your efforts are greatly appreciated and highly valued. Thank you!”

**Piedmont:** “The Distance Learning staff holds an annual workshop for new and returning faculty teaching in the Distance Learning classroom. The faculty are asked for input on the courses they feel are well suited in the video-conferencing format. Members of the faculty are also surveyed as to the conditions in the teleclass classroom and given the opportunity to make suggestions for improvement. We have established a systematic approach for collecting and maintaining materials for the teleclass faculty. There is a Distance Learning Technician to assist the instructors in handling equipment, distributing handouts, collecting homework, and proctoring exams. Instructors are asked to provide the DL staff with ‘Plan B’ in case of equipment failure. Good communication is the key to providing adequate support to faculty and students.”

**Mayland:** “Telecourses are more self-contained and should be fully developed before delivery. On the other hand, ITV courses require constant attention because they are the results of ongoing partnerships between students, faculty, technicians, room integrators, and especially the good folks at NCIH.”

**McDowell Technical:** “Faculty should not be required to utilize distance learning classes; however, those who teach distance learning classes they should be given incentives for their innovative efforts.”



**Wilkes:** “The history at WCC has been, ‘if you build it, they will come’ partnership among students, instructors, a competent, flexible, and personable IT staff, administrators, and leadership at every level.”

**Southwestern:** “There are many challenges teaching over an ITV network. Incorporating e-mail and a class website will make the endeavor more efficient and rewarding for all involved.”

**James Sprunt:** “Without the support of administration, distance learning cannot and will not grow. There has to be support for this method of delivery with personnel, training, and faculty incentives. It is also imperative to educate administrators about distance learning and the benefits to the college. A program of any kind will not flourish without support.”

**Beaufort County:** “Distance learning technology is both fun and a lot of hard work. Understanding and utilizing the information to improve the teaching/learning process is a continuous and challenging task. Our job is to identify what works and to eliminate what does not, creating an educationally sound environment.”

## Data NCIH Consolidation Project

Dr. Bill Randall, NCCCS

### Project overview

The Data and North Carolina Information Highway Consolidation Project (Consolidation Project) maximizes the effectiveness of available funds to support NCCCS data and videoconferencing services. The objective of this project is to improve data capacity and expansion of video services across the state. To accomplish this objective, the individual funding streams for T-1 (1.54 MB) data

connectivity and videoconferencing services will be combined into one.

The original funding formula was based on a 12-year-old videoconferencing standard (H.320), which prevented cost-effective expansion of the NCIH or data services for the NCCCS. In the original budget, \$1.2 million was dedicated to support the 44 NCIH sites while a modest \$0.6 million provided T-1 data to community colleges.

### Feasibility study

A feasibility study conducted in partnership with North Carolina Information Technology Service (ITS) staff in late 2004 determined that data and video services could be improved and expanded statewide with existing funds.

The feasibility study concluded that the consolidation was technically possible. The modest savings could then fund expansion of the NCIH to include the remaining 14 community college main campuses. An additional benefit was the increase in usable bandwidth realized through the conversion to the H.323 standard. Individual colleges could also use local funds to upgrade their ITS data to 3MB or higher.

Both data and NCIH video services will continue to be provided by ITS. The consolidation is a result of recent wholesale and technology improvements to the ITS network. The North Carolina Association of Community College Presidents (NCACCP) approved the Consolidation Project proposal on January 28, 2005.

A status report of the Consolidation Project was presented to the NCACCP Technology Committee. The report was received favorably and the recommendation, to use the savings realized by this consolidation to expand video service to all colleges, was endorsed. On April 29, Pamlico CC requested funding for video services for their main campus. Pamlico waited



over ten years for funding support to open a videoconferencing site.

## Three-phased project

In *phase one*, each community college established a team to evaluate their data and video needs. The teams determined how their needs could best be served with available funds and filed change orders with the System Office and ITS. Phase one ended April 15.

*Phase two* is currently underway. In phase two, ITS staff fills change orders, upgrades routers, and reconfigures videoconferencing equipment for the H.323 standard.

*Phase three* will expand video service and migration to H.323 to those campuses currently without video service.

## Project time line

The Consolidation Project implementation is one of the largest mass technology conversions in the history of the state. The project began on January 28, 2005, with the approval of the NCACCP and is scheduled to end July 1, 2005.

## Project highlights

The Project was an inter-agency solution to consolidation challenges involving NCCCS and ITS. The interagency team was responsible for:

- Developing a feasibility plan
- Obtaining approval by the NCCCS Business Office
- Creating a joint proposal by the NCCCS Business Office and Administration Division
- Obtaining support from the NCACCP
- Converting the feasibility plan to a project plan
- Implementing the project plan
- Establishing a team approach to consolidation at each college involving critical personnel - Business Manager, IT Administrator, and DL Administrator

- Meeting deadlines

## System-wide communication effort

The ability to communicate directly and simultaneously with all the college teams was seen as critical to the success of the plan. To facilitate collaboration and implementation of the plan the following communication technologies were used: web-resources, videoconferencing, live streaming of NCIH sessions, and conference calls. A complete collection of consolidation materials and resources are available at [www.ncih.net/ccproject.html](http://www.ncih.net/ccproject.html) as well as an 11-minute orientation video/audio overview.

## WHAT'S AVAILABLE FROM THE VIRTUAL LEARNING COMMUNITY...

### Future publication submission schedule

Volume 6, Issue 2 submission deadline, Monday, August 1

Volume 6, Issue 3 submission deadline, Thursday, December 1

### How to be a Contributor

Send your articles and ideas to [berardinellip@nccommunitycolleges.edu](mailto:berardinellip@nccommunitycolleges.edu)  
Your suggestions are always welcome.

**The following materials and services are available from the VLC. There is no charge for use by North Carolina Community Colleges. For information, contact [grossj@nccommunitycolleges.edu](mailto:grossj@nccommunitycolleges.edu) or [berardinellip@nccommunitycolleges.edu](mailto:berardinellip@nccommunitycolleges.edu)**

### Online Courses

Preview these at <http://bb.ncccs.cc.nc.us:1677> by clicking "Course Catalog," then "Preview," and then searching for the course number or browsing through the folders. Click "Preview" next to any course name to get in. Contact your DL administrator or Blackboard server



administrator to transfer the course to your college server for local adaptation and use.

## **Online Course Template (OCT)**

The course you need isn't available from the VLC? No problem, start from the OCT when writing your own course to save development time with pre-built materials and templates, to access valuable design advice, and to guarantee baseline course quality. Two versions are available on the server <http://bb.ncccs.cc.nc.us:1677> in the "Support Courses for Online Educators" folder. Use OCT2 for individual course development. Your Blackboard or DL Administrator can set a copy of the OCT up for your use.

## **Principles and Techniques of Online Instruction (PTOI) Course**

Also in "Support Courses for Online Educators" <http://bb.ncccs.cc.nc.us:1677> this course covers major topics of online course administration, design, and teaching. It is designed for flexible use as either a semester-length group course or an individually paced tutorial.

## **Newsletters**

Past issues of the "Creating a Virtual Learning Community" and "Expanding the Virtual Community" newsletter are archived online at [http://www.nccommunitycolleges.edu/DistanceLearning/vlc\\_newsletters.htm](http://www.nccommunitycolleges.edu/DistanceLearning/vlc_newsletters.htm).

## **NCCCS Distance Learning Site**

Use materials here to connect with others, find online courses for students, learn about online teaching, or get VLC news. The site is located at <http://www.nccommunitycolleges.edu/DistanceLearning/index.html>.

## **Training Support**

In addition to the PTOI course, the VLC has other kinds of training and development programs. The VLC Coordinators can help connect your campus with needed trainers. Conference presentations can also be arranged.

