

within and between higher education systems; and opportunities for online program delivery and other distance technology delivery systems.

- (5) An analysis of and suggested updates to existing long-range capital plans of both the University and Community College Systems that will address land acquisition and facility needs to support the program recommendations identified in this study, taking into account opportunities for modernization of and new uses for existing facilities.
- (6) With regard to the University System, there shall be special emphasis on the development of signature programs for Historically Black Colleges and Universities and the University of North Carolina at Pembroke. In conducting the study, the consulting firm shall take into account that the General Assembly finds the Historically Black Colleges and Universities and the University of North Carolina at Pembroke to be institutions with important historical traditions and equally important contemporary purposes and, as such, are valuable and indispensable assets of The University of North Carolina and the State. The General Assembly intends to encourage the continued growth and development of those constituent institutions and would resist any suggestion to eliminate the historical function and purpose of those institutions.
- (7) With regard to both the University System and the Community College System, there shall be an acknowledgement of the existence and importance of a strong liberal arts education foundation and, at the same time, an emphasis on existing and new programs specifically aimed at meeting business, industry, workforce, and career needs of North Carolina in the State's changing and growing knowledge-based economy, taking into account, as appropriate, State and regional economic strategies.

SECTION 6.2. These studies shall be designed to provide information and recommendations that will assist the General Assembly in setting priorities for funding to address the strategic higher education needs of the State. The Board of Governors, the State Board, and their consultant shall periodically report their findings to a higher education programming subcommittee of the Joint Legislative Education Oversight Committee. The two boards and their consultant shall report the preliminary results of the study to the General Assembly and to the Joint Legislative Education Oversight Committee by April 15, 2005, and shall file a final report and recommendations with the General Assembly and the Joint Legislative Education Oversight Committee no later than December 31, 2005.

SECTION 6.3. The Joint Legislative Education Oversight Committee may create a higher education programming subcommittee to monitor the study authorized in this part.

SESSION LAW 2005-276
SENATE BILL 622

UNIVERSITY SYSTEM AND COMMUNITY COLLEGE SYSTEM JOINT
STUDY OF HIGHER EDUCATION STRATEGY/AMEND
REPORTING REQUIREMENT

SECTION 9.18. Section 6.2 of S.L. 2004-179 reads as rewritten:

"SECTION 6.2. These studies shall be designed to provide information and recommendations that will assist the General Assembly in setting priorities for funding to address the strategic higher education needs of the State. The Board of Governors, the State Board, and their consultant shall periodically report their findings to a higher education programming subcommittee of the Joint Legislative Education Oversight Committee. The two boards and their consultant shall report the preliminary results of the study to the General Assembly and to the Joint Legislative Education Oversight Committee by ~~April 15, 2005,~~ June 15, 2005, and shall file a final report and recommendations with the General Assembly and the Joint Legislative Education Oversight Committee no later than ~~December 31, 2005.~~ December 31, 2006."

July 21, 2006

Ersine Bowles
President
The University of North Carolina General Administration
Box 2688
910 Raleigh Road
Chapel Hill, NC 27515-2688

H. Martin Lancaster
President
North Carolina Community College System
Caswell Building
200 West Jones Street
Raleigh, NC 27603-1379

Dear President Bowles and President Lancaster:



The Pappas Consulting Group Inc. is pleased to present you its final report in fulfillment of HB1264, *Staying a Step Ahead: Higher Education Transforming North Carolina's Economy.*

Appendices to this report contain: HB1264; the Final Interim Report dated January 17, 2006; Preliminary Recommendations dated February 1, 2006; the NCCCS Mission Statement; the UNC Mission Statement; and enrollment projections for UNC and NCCCS.

During this study, there have been a number of significant leadership changes at the University of North Carolina. In January, Ersine Bowles assumed the Presidency. Since that time, a new Board Chair has been elected and new appointments in three key areas of the General Administration have occurred in Academic Affairs, Finance, and Economic Development.

From the Community College System perspective, the senior leadership of the System has remained the same. A remarkable collaboration between the President of the University of North Carolina and the President of the North Carolina Community College System emerged in January of this year. A joint UNC-NCCCS Cabinet has been formulated and has started meeting on a quarterly basis to enable both systems to work more seamlessly for the benefit of students in both sectors and to formulate higher education policy that will address the educational, workforce and economic development needs of the state.

Erskine Bowles, President
President

H. Martin Lancaster
President
Page 2

Our report provides much for UNC and NCCCS, as well as the legislature and others to consider. In the case of the University of North Carolina, the impending, mandated Board of Governors Mission Review will enable the 16 constituent members and UNC to undertake a meaningful self-assessment in order to serve better the people of the state of North Carolina, especially when taken in concert with the many recommendations contained in this report.

When we started this study, we indicated that to our knowledge HB1264 was the “first of its kind” in the nation as it engaged both the University of North Carolina and the North Carolina Community College System in a transformative effort. Doing the right things right are essential in this increasingly, global, competitive and instant gratification culture in which we reside. There are a number of bold initiatives, indeed some “first-of-a-kind” recommendations in this report that will require will and fortitude. We are hopeful that the leadership in place at the University of North Carolina and the North Carolina Community College System will enable higher education in North Carolina to help transform North Carolina’s economy and that this report will add value to that effort.

Sincerely yours,



Alceste T. Pappas, Ph.D.
President and CEO
Pappas Consulting Group Inc.

**STAYING A STEP AHEAD: HIGHER EDUCATION TRANSFORMING NORTH
CAROLINA'S ECONOMY**

FINAL RECOMMENDATIONS

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STAYING A STEP AHEAD: HIGHER EDUCATION TRANSFORMING NORTH CAROLINA'S ECONOMY

FINAL RECOMMENDATIONS

INTRODUCTION

The State of North Carolina enjoys an outstanding reputation for connecting higher education and the economy. Long before it became fashionable, North Carolina recognized the link between research and the economy, between universities and businesses by creating the nation's first research park: the legendary Research Triangle Park. North Carolina and its communities also over the years built an enviable network of community colleges, making workforce training readily accessible to the people of the state. One of the primary reasons for the innovations in creating synergies between higher education and the economy has been the partnership with, and leadership from, state government. The proactiveness of the legislature surfaced again with the passage of HB 1264 in 2004. This legislation sought to insure that higher education was sufficiently anticipating the future economic needs of the state.

HB 1264 correctly assumed that North Carolina could not just rely on the traditional modes of economic development; the state needed economic transformation. While all states faced economic challenges early in the new millennium, few – if any – experienced the pressures hitting North Carolina. It came up on the short end of an economic triple play, as the traditional powerhouses of tobacco, textiles, and furniture all declined. The shift in employment sectors has been away from manufacturing (from 27% of employment in 1990 to 15% in 2005) and towards the service sector that now comprises over 70% of the employment in the State.

- Total employment is projected to increase to 4.8 million by 2012 (increase of 700,000)
- Manufacturing will continue to lose jobs in the future
- Service sector jobs will continue to replace goods-producing jobs

- 2000-2010 North Carolina population increased 16%; U.S. average 10%.
- In-migration of Hispanics grew 394% (300,000 residents) during the 1990's.
- Blacks make up 22% of state's population, by far the largest minority group in the state.
- Net migration accounted for 70% of population increase (1,000,000 people)

At the same time that major shifts are occurring in the economy, there are fundamental demographic changes taking place. This growing and already diverse state will become increasingly diverse. For instance, from 1999-2004 the population of North Carolina increased 7.4% overall, yet the White population only grew 4%. The Black population grew by 7.4%; the Hispanic population grew by 59.2%. The diversity, however, has regional variation. Along the Coastal Plain, Blacks account for 30% of the population, and in six counties in the east and northeast, over half the population.

Without positive intervention, this diversity will pose substantial economic, educational, and regional challenges for the state. For example, the poverty rate in North Carolina is approximately the same as the national average (12.4%), yet 23 rural counties have poverty rates above 18%. The median household income is below the national average (\$39,184 vs. \$41,994) with significant disparities by race (White \$42,530; Black \$27,845; and Hispanic \$32,353).

- North Carolina population 48% urban, 52% rural.
- In 2005, overall unemployment rate of 5.9%
- In 2005, 13 rural counties had unemployment rates above 8%.

The state is not monolithic. It is a collection of very different regions, of many communities of varying sizes and wealth. As John Silvia, the Chief Economist of Wachovia Corporation, pointed out, the state cannot even be divided into urban and rural areas any more because of the “increasing ‘suburbanization’” in the metropolitan areas. And there are significant differences between one city and another, between one rural area and another.

- Almost one million people live in poverty.
- 25% Hispanic, 23% Black, 21% American Indian poverty rates in rural counties.
- Displaced workers are more than 1.7 times as likely to be Black.

Thus, a one-size-fits-all solution to economic growth is unrealistic. A couple of common themes, however, apply to every region and to every community. First, the better educated the population, the better the prospects for economic transformation. Second, the better the quality of life, the better the prospects for economic transformation. On the latter point, authors like Richard Florida have pointed out the importance of “place,” especially for young professionals. Thus recommendations that impact the quality of the schools (teachers), of health care (nursing and other health fields), and cultural opportunities (the performing and fine arts) are indeed responsive to economic development.

While sensitivity to regional differences is important on one level, on another level it must not constrain educational responses. With the advent of technology in education, past limits of space and time can be significantly diminished. The same is somewhat true of economic opportunities. Technology allows, for example, call centers to be located anywhere as long as there is a willing and sufficiently skilled workforce and an adequate technology infrastructure.

The real economic competition today is not between different parts of the state or even between southern states or within the U.S. Global competition is palpable and as Tom Friedman so convincingly portrays the world has become flat. And as Silvia points out, “This global labor market represents a challenge to labor market participants and policy makers alike as both struggle to grasp the implications of domestic oriented decisions in a global labor market”. He concludes that the solution is not to try to attract companies to fit the current workforce skills but to retrain the workforce to fit the emerging industries. Public policy will need to be intentional in accomplishing this.

The college population will likely increase significantly, with the population of college-age North Carolinians in 2010 reaching almost 1 million. In addition, more and more older students will seek life-long learning as people change careers multiple times, changes that often require new skill sets. As with the general population, the higher education population will be more diverse.

- 19.5% growth in college age cohort by 2010.
- 47% growth in 55-64
- 19.4% growth in 65+.

With high drop out rates from high school, North Carolina is facing an unprepared workforce for a knowledge economy. A recent (June 20, 2006) report by the Education Research Center utilizes a Cumulative Promotion Index to estimate the probability that a student in the 9th grade will complete high school on time with a regular diploma. North Carolina was at 66%, which is below the national average. The high was 84.5% in New Jersey; the low was 52.5% in South Carolina. The increasing diversity will further challenge preparation as there are substantial educational achievement gaps among different socio-economic groups. For example, in UNC, the overall first year retention rate (those freshman students returning for the sophomore year at the same institution) was 81.2% in Fall 2004. The rate for Whites was 82.5%, for Hispanics 80.2%, and for Blacks 77.8%. The six year graduation rate was 59.1%. The rates for Whites was 62.6%, for Hispanics 50.9%, and for Blacks 49.8%. NCCCS reports its data differently, although achievement gaps are apparent (for example, 12.76% of White enrollment were graduates in 2004-05, compared to 9.68% Black and 9.03% of Hispanic enrollment).

North Carolina's workforce, however, is not and will not all be homegrown. Indeed, North Carolina had the third highest net domestic immigration between 1995-2000 at 338,000 (after Florida and Georgia). In key areas, like teachers and health fields, North Carolina is likely to continue to import professionals.

So change is, and will be, the norm in North Carolina. Changes in its demographics and changes in its economy will be ever-present. To respond to both of these changes, there will need to be accelerated changes in education. This study has concluded that, in general, both UNC and NCCCS have been responsive and, to some degree, anticipatory about the needs of North Carolina's economy. Indeed, while HB 1264 might have expected large gaps between the production of graduates in many fields and employment opportunities that has not proven to be the case. However, the trends all point to the imperative of higher education and the state accelerating its partnership in a number of areas and of discovering new processes and opportunities for anticipating and responding to future needs. For example, the long-standing collaboration between UNC and NCCCS has already accelerated in recent months, and this study points out ways that this vital collaboration can continue to grow.

Business and industry nationally and in North Carolina have also called for changes in the skills and knowledge that students gain from higher education. They want students who can solve more problems; who can work in teams; who can see the big picture; who can communicate effectively; who can utilize technology effectively; and who can bring a strong work ethic. They don't want students who cannot think across disciplines. They do want more students with strong math and science skills. Again, there are already best practices in North Carolina (for example, the UNC focused growth initiative emphasized the science and technology disciplines, especially for minority students), but not yet systemically and pervasively in the higher education institutions and the pipeline from K-12 appears to have many leaks. This report includes recommendations to address these and other issues of importance to the state.

This final report, when viewed with the Final Interim Report (Appendix 2) and Preliminary Recommendations (Appendix 3), responds to each of the seven items in HB 1264 (Appendix 1):

1. Analysis of state and regional demographic, economic, and educational data. (*See Final Interim Report, Section 3. A, B, C and Section 5. A, B, C, D.*)
2. Enrollment projections for UNC and NCCCS. (*See Appendix 6 and Final Interim Report, Section 4.D and referenced in Attachment 5 of that report as Appendices 4.D.1 and 4.D.2.*)
3. Analysis of current academic program offerings. (*See Final Interim Report, Sections 4.A and 4.B and referenced in Attachment 5 of that report as Appendix 4.B.1.*)
4. Recommendations on increased effectiveness through collaborations and distance learning. (*See pages 29-32 in this Final Report.*)
5. Analysis of long-range capital plans. (*See pages 32-36 in this Final Report.*)
6. Special emphasis on the Historically Black Universities and UNC Pembroke. (*See pages 17-29 in this Final Report and page 5 in Findings and Preliminary Recommendations. See also Final Interim Report, Section 4.H.*)
7. An analysis of the role of the liberal arts and of programs aimed at the state's knowledge-based economy. (*See pages 6-16 in this Final Report and page 20 in Findings and Preliminary Recommendations. See also Final Interim Report, Section 4.G.*)

As noted previously, most of the analysis and data requested in HB 1264 are included in the two previous documents produced by this study. The Final Report focuses on recommendations. These recommendations are organized as follows:

- I. Mission
- II. Academic Programs (Processes; Revolving Funds for Collaboratives and Start-ups; Soft Skills; General Education, Liberal Arts, and Majors; Program Gaps)
- III. K-16 Approach
- IV. HMI Signature Programs
- V. Distance Learning and Facilities
- VI. Research, Technology Transfer, Economic Transformation Structures, Regional Partnerships, and Rural Economic Transformation
- VII. Legislative Actions

In those instances where analysis and data are not included in the previous reports, the recommendations include background, challenges, and a summary. This applies to the Program Gaps Section of Academic Programs, to the HMI Signature Programs, to the Distance Learning and Facilities, to the Regional Partnerships, and Rural Economic Transformation sections of this report.

The recommendations, among other things, call on both UNC and NCCCS to take a more intentional leadership role in higher education and economic transformation. They call on even greater collaboration between the two systems (and K-12) and among institutions within each system. They challenge the systems and institutions to be even more focused on innovative ways to respond to both key traditional programs and to emerging industries. They ask the legislature to be a partner by investing in new programs and in changing some laws and practices that inhibit optimal responsiveness of higher education. Collectively, the recommendations expect more focus on economic transformation by higher education and a series of follow-up activities. One finding reported earlier was that higher education in North Carolina had been more proactive and responsive to economic development needs than most states. However, attention to these specific recommendations ought to insure that North Carolina can indeed stay a step ahead and be the leading asset to the state as it transforms its economy.

I. MISSION

Recommendations

1. While reaffirming its current mission (Appendix 4), the NCCCS Board should consider adding an item to its mission to reflect its partnership with UNC for advancing higher education in North Carolina, especially as it relates to economic development.
2. The UNC Board should consider adding an item to its mission (Appendix 5), to reflect its partnership with the NCCCS for advancing higher education in North Carolina, especially as it relates to economic development.
3. Within the Board of Governors mandated UNC mission review of each of its institutions, the Board needs to insure that:
 - (i) Each institution's mission includes a specific statement of the University's role in economic transformation.
 - (ii) Each institution's mission is sufficiently distinctive in keeping with North Carolina's tradition of mission differentiation.
 - (iii) Each institution's mission permits it, either individually or collaboratively, to meet the demonstrated economic development needs of its region and that the collective missions meet the demonstrated economic development needs of the state as a whole.

II. ACADEMIC PROGRAMS

A. Processes

Recommendations

1. Both NCCCS and UNC should conduct reviews of their academic program approval processes to insure that they are sufficiently nimble to respond to, or to anticipate, emerging needs. This review should include input from business and industry.
2. UNC should ask a group of Chief Academic Officers (who should select their own chairperson) to identify modifications to the academic program review process specifically for programs that respond to economic development needs.

They should also design:

- (i) "Incubator" degrees with fast track initial approval and assessment of outcomes after one and five years. An "incubator" degree would be one that responds to an emerging industry need and would be experimental in nature; therefore, it would not need to be as highly developed or as significantly documented as a normal program approval.

- (ii) Accelerated degree programs at the Bachelors, Masters, and Ph.D. level. These programs should be developed based on need, should be able to be completed in at least 25% less time than the norm for that level of degree, and should utilize hybrid (in person/e-learning) modes of delivery. UNC should request a permanent revolving fund in the amount of \$2.5 – \$3.0M to fund the start-up of these programs; industries that directly benefit should also help fund start-up costs.
 - (iii) Elimination of Graduate Council review of new graduate programs. Few state systems include such a step that inevitably slows the approval process and vests considerable authority in those with existing graduate programs.
3. Both UNC and NCCCS should establish enrollment projection models that can measure the impact of changes in participation, retention, and graduation rates (as well as demographic changes).

B. Revolving Program Funds for Collaboratives and Start-Ups

Recommendations

1. UNC and NCCCS should significantly increase the number of “ladder” degree programs and collaborative degree programs that have statewide approval (rather than individual articulation agreements). These should be focused in high demand economic development areas; should, whenever possible, utilize (in whole or in part) e-learning; and should create pathways from certificate programs to Associate degrees to Bachelors and, in some instances, to Masters and Doctoral programs. Allied health programs should be the initial target. A standing committee of chief academic officers with representatives from institutions in both systems, and chaired by the CAO of each system, should be charged with this responsibility. UNC and NCCCS should jointly request legislative funding for a permanent, revolving fund of \$10M to support UNC/NCCCS collaborative programs with priority given to those in high demand areas.
2. NCCCS should examine its basic skills programs, its skills certification programs, and its statewide standards to insure that they are anticipating future state job needs. NCCCS Board should request legislative funding for expansion of these programs where there is a demonstrated need. It should also request a permanent revolving fund of \$2.5 – \$3.0M to fund the start-up of academic degree programs; industries that directly benefit should also help fund start-up costs.

C. Soft Skills: General Education/Liberal Arts and Majors

Recommendations

1. UNC and NCCCS should jointly convene a business and industry group (with additional input from non-profit and governmental sectors) to identify the skills and knowledge needed to succeed in the 21st century economy.
2. UNC and NCCCS should hold a joint summit to examine the future of their general education programs, utilizing the information from the group above. This summit should also explore where the information could be incorporated into the requirements of majors.
3. UNC should require each of its institutions to review and revise its general education requirements to incorporate both the skills and knowledge expectations of the 21st century and the need for greater interdisciplinary thinking. Best practices should be sought from North Carolina A&T State University's "University Studies" for recommendations C.2 and C.3.
4. UNC should reaffirm the individual nature of each of its institution's general education requirements, while also requiring each of its institutions to accept the completed general education requirements from another UNC institution as meeting its own general education requirements.
5. NCCCS should review and revise its general education requirements for transfer programs to incorporate both the skills and knowledge expectations of the 21st century and the need for greater interdisciplinary thinking. This activity should be conducted in consultation with UNC to insure the continued transferability of the core to all UNC institutions through the Comprehensive Articulation Agreement (CAA).
6. NCCCS should review and revise its general education component of the Associate in Applied Science degrees, since an increasing number of these degrees are likely to transfer to UNC primarily through articulation agreements at the UNC level (preferably) or individual UNC institutions. For this reason, the activity should be conducted in consultation with UNC.

D. Major Program Gaps

Background

HB 1264 called for an analysis of current program offerings in both UNC and NCCCS so as to identify major gaps with the workforce needs of the state. This analysis (See Final Interim Report, January 17, 2006, pages 67-82) indicated that, in general, both systems have been attentive and responsive to the needs of the state. The track record suggests that the systems will be able to respond to most of the existing gaps with some minor adjustments to their program development and review processes (see recommendations

II.A.1-3) and some significant increase in collaborative (ladder) programs (see recommendation II.B.1).

It is also likely that UNC and NCCCS will both work with the emerging industries (identified in this report as Advanced Manufacturing; Advanced Materials; Biotechnology and Pharmaceuticals; Computing, Software, Internet; Design and Film; and Logistics and Distribution) to respond to their needs, although an additional recommendation is made in that regard (See recommendation D17). Indeed, there is already evidence of innovative and creative responses to emerging areas, such as in the Kannapolis project, the BioNetwork initiative and several others where both systems are collaborating and where research and instruction are adding substantial value.

Challenges

There are a number of challenges in meeting state shortages in three key areas: **teaching, nursing, and computing**. These challenges are not unique to North Carolina; they exist in virtually every state. The issues surrounding these areas tend to be complex. All three have career attractiveness challenges and gender (and, to some extent, race) disparities. Teaching and nursing have relatively low salaries, difficult working conditions, and are female dominated professions. Computing is a male dominated profession that generally pays well but is not as attractive a career as it once was.

Teaching as a profession does not attract sufficient interest from students to meet state needs nor does it retain an adequate percentage of those students who do decide to enter the profession. Nursing attracts a significant amount of interest from students but there are limits on program size particularly because of nursing faculty shortages and because of a lack of clinical sites. Computing has seen a decline in student interest (declared majors declined 32% from 2000-2004) for a number of reasons (including concerns about job availability, offshore outsourcing, and lifestyle) and has never been able to attract a substantial percentage of female students (who now constitute a significant majority of students in higher education; only 0.3% female students nationally expressed interest in majoring in computer science).

North Carolina higher education has responded aggressively to these gaps, especially in teaching and nursing, employing many best practices and receiving some support from the legislature for initiatives. However, significant gaps remain.

Recommendations

1. The normal program development and review processes of UNC and NCCCS, as modified per recommendations II.A.1-3, should be utilized to respond to the following gaps:

- At the Associate degree/diploma/certificate level: office staff of various types; emergency medical technicians; computer programmers; medical and clinical lab technicians; aircraft mechanics and service technicians; and surveying and mapping technicians.
- At the Bachelors level: accounting; business; recreation; and social work.
- At the Masters level: rehabilitation counseling; physical therapy; and market research.
- At the Doctorate level: medical sciences; clinical, counseling, and school psychologists.
- At the professional level: law; pharmacy; medicine; dentistry; veterinary.

While the normal processes may be sufficient for most of these programs, several observations need to be made. The gaps in the Masters in rehabilitation counseling (273 projected annually) and Doctorate in clinical, counseling, and school psychologist (76 projected annually) need special attention. There are currently only four institutions that offer the Masters in rehabilitation counseling (Appalachian State University, East Carolina State University, UNC Chapel Hill, and Winston-Salem State University). UNC will need to either significantly expand these programs and/or create additional programs and/or seek an online collaborative degree solution. There are currently only three institutions that offer the Ph.D. in clinical counseling, and school psychologist (UNC Chapel Hill, North Carolina State University and UNC Greensboro). UNC will need to either significantly expand these programs and/or create additional programs (although that would have mission implications). The gap in the physical therapy Masters (66 projected annually) is complicated by the field moving towards an entry-level Doctorate. The gap in pharmacy (154 projected annually) may be partially addressed by the new collaborative program between UNC Chapel Hill and Elizabeth City State University (which is off to a promising start in its first full year), plus the possibility of a similar program at Winston-Salem State University. In both instances, these programs respond to the HB1264 interest in signature programs at HMI's. The gap in dentistry (67 projected annually) has recently been addressed by UNC with a proposed program strengthening at UNC Chapel Hill and the addition of a program, aimed at rural dentistry care, at East Carolina University. This again reaffirms that the normal processes can be responsive.

As with the UNC program gaps, the NCCCS's normal program development processes will address most of the identified needs in the foreseeable future. Outside of nursing, the largest gap is in what can be collectively called office or administrative support jobs of all types, such as executive secretaries, administrative assistants, secretaries, legal secretaries, and so on (over 2,000 projected annually). All 58 colleges offer the Office Systems Technology program and a smaller number offer more specialized programs such as in the legal office area, including Paralegal Technology. Where there is demonstrated local need, colleges will need to ramp up capacities in the office support programs. Computer programming jobs show a projected annual gap of 267. Thirty-six of the 58 colleges offer the AAS degree in

this area. The NCCCS should closely examine the gap in this area to determine if additional programs are needed or if existing programs should focus on expanding their production of graduates. Special attention will need to be focused on responding to gaps in aircraft mechanics/technicians (192 projected annually), emergency medical technicians (84 projected annually), surveying/mapping technicians (156 projected annually), and medical/clinical lab technicians (146 projected annually).

2. A statewide Task Force should be established to examine the multiple issues that involve health related fields. There should be special emphasis on collaborative programs between UNC and NCCCS; on accelerated programs; and on the use of distance learning, particularly online learning. The legislature should consider funding the priority recommendations of the Task Force.

With an aging population and general demographic and educational trends, North Carolina faces many projected shortages in health related fields. Indeed, an examination of the gap areas listed in recommendation II.D.1 indicates that a disproportionate number of them, at all educational levels, are in health related fields. Many of these programs are particularly expensive to offer and require the cooperation of the health care sector (for clinical sites, for example), thus the need for the legislature and the health care sector to be partners in the solutions.

3. UNC and NCCCS should create a special program to produce faculty for the North Carolina community colleges and the legislature should fund this program. Allied health fields, particularly nursing, should be the first priority for this program and distance learning should be a key component.

Many of the gaps in the NCCCS are created by the chronic shortage of faculty. Since community colleges tend to hire a significant portion of faculty from in-state, a special program specifically to prepare those faculty in-state could reap significant benefits. A tuition forgiveness program for teaching within NCCCS would be a particularly attractive feature.

4. The UNC President should reaffirm the targets for teacher graduate production and retention as outlined in "A Plan to Address Shortage of Teachers in North Carolina" by making results part of his annual evaluation of Chancellors. The President should also inventory all real and perceived UNC policy and practice barriers to innovation and to accelerated programs and work toward the removal of all such barriers (for example, no formula funding for summer enrollment, a prime period for continuing teacher education programs; registration and financial aid challenges in joint programs.)

Leadership matters. Frequently education programs have been low on the priority among schools and colleges within the University. Furthermore, those schools and colleges often lack innovation and are viewed as risk averse. In fairness, the demands on them have increased substantially in recent years and the student pool has decreased since World War II as female students have seen other professional fields (such as medicine, law, veterinary medicine) open up to them. Accountability has

also increased more than in most fields, with national tests such as PRAXIS and the requirements of the “No Child Left Behind” act. Nevertheless, schools and colleges of education must step up to the challenge, and the Chancellors must be made fully accountable for the performance of their education programs.

5. Higher education leaders should consolidate, simplify, and adjust the scholarship and grants programs for students seeking to become teachers.

There is an impressive list of available scholarships (38 pages of them) from federal, state, and private sources. These have undoubtedly proved to be extremely helpful in increasing interest in education. However, many of them were designed at a time when the traditional student was full-time, 18-24 years of age, and enrolled in a traditional educational major. The reality today is that the highest potential group for growth is the non-traditional student, seeking certification in other than a traditional bachelor degree program. North Carolina has recognized this reality with its multiple programs, such as NCTeach, authorizing NCCCS to develop lateral entry programs, and funding a 2 + 2 online degree program. Wherever it is feasible, donors should be encouraged to be more flexible in the requirements of their scholarships and the state should have relatively few, but easily marketed, scholarship programs.

6. UNC should assume both the responsibility for a three-year induction program for all the teachers it trains and should be given the responsibility to train and utilize mentors for new teachers (for example, by retired teachers) as part of the induction process.

The loss of new teachers to the profession in the first three years is substantial (greater than 1 in 5). There are many reasons for this, including personal ones, and a substantial proportion of those who leave may one day return to the profession. Nevertheless, far too many new teachers abandon the profession because of the challenges they face early on and the sense that they have no real support system. Student teaching experiences alone cannot prepare a student fully for all the challenges of the profession. In addition to traditional induction programs, a mentoring program can be a fine complementary support system. However, it needs to be integrated with the induction program, hence, the recommendation that UNC assume that responsibility and any resources available for training and mobilizing mentors.

7. The state’s K-16 group (see recommendation III) should undertake, with legislative support and funding, a major student achievement tracking data project and a teacher-need projection data project.

The student achievement data model would be designed, within appropriate privacy guidelines, to track individual student performance PreK – 16. This can be accomplished through data-sharing agreements, or through data warehouses, or through a unit-record system (which is the most reliable but most controversial methodology). This student performance system would then enable research to determine if there is a correlation between student achievement and teacher

preparation. North Carolina also needs a more reliable methodology for projecting the number of teachers that will have to be employed. One current project methodology predicts a shortage of 5,000 annually (ECS); a more sophisticated analysis projects 11,000 (UNC "A Plan to Address the Shortage of Teachers in North Carolina"). Neither makes a distinction between "need" and ability (that is resources) to actually hire. Nor do they examine in detail regional variations or discipline differences. If the state is to invest additional dollars in meeting projected needs, it must have the most reliable methodology for doing so.

8. UNC should, in collaboration with NCCCS, place general emphasis on the preparation of teachers of the STEM (Science, Technology, Engineering and Math) disciplines. Support should be provided for recruitment efforts (including out-of-state students), for summer enrichment programs, and focused scholarships. In particular, the lessons learned from introducing STEM degree programs in the HMI's should be implemented in attracting minorities to be teachers of the STEM disciplines.
9. UNC and NCCCS should take a stronger leadership position in increasing both the number of nursing graduates and nursing faculty.

While there are a number of collaborative programs (especially between a UNC institution and one or more NCCCS institutions), there does not appear to be great intentionality about using the power of being systems to increase collaboration, especially among institutions within the same system. As with the production of teachers, for example, UNC General Administration has basically set institutional targets. This does provide metrics and accountability, yet it does not necessarily enable the whole to be greater than the sum of the parts.

The University System of Georgia, for example, has a centrally led, institutionally implemented Intellectual Capital Partnership Program (ICAPP). This has produced over 1,000 additional nursing graduates. It also led the introduction of two collaborative programs to increase the number of available nursing faculty: The Medical College of Georgia will offer its existing Doctor of Nursing Practice program at eight other colleges and universities in the state; Georgia State University will partner with five other institutions to establish a statewide Doctoral (Ph.D. program) in nursing.

In the NCCCS, some nursing programs, particularly the Associate degree in nursing, have been offered in consortial arrangements. Currently, 11 of the 58 colleges offer the ADN program in collaboration with other colleges (through four consortia). All four collaborative programs are in rural parts of the state. The State Board of Community Colleges is encouraged to continue and to increase its emphasis on sharing resources, especially for high cost programs.

10. The state of North Carolina should invest in a specific program aimed at increasing the number of nursing faculty in the community colleges.

As noted in recommendation D.3 above, this needs to be a special program designed jointly by UNC and NCCCS. It should be an intensive and accelerated program offered collaboratively by a number of UNC institutions under UNC General Administration leadership, utilizing distance learning. The program design should be innovative and the students in the program should be supported with forgivable loans in an amount sufficient to allow them to earn their degree in the shortest possible timeframe (that is to be able to go “more than full-time”).

11. UNC and NCCCS should require all their nursing programs to become nationally accredited (but only if the legislature fully funds both initial and on-going costs); should establish minimum sizes for programs; and should increase minimum graduation and licensure pass rates for continuation of programs.

This is a complex issue. On the one hand, because there are more students who want to become nurses than there are available slots for them (the Task Force on the North Carolina Nursing Workforce Report in 2004 indicated that there were 7,000 students who could not get admitted), one could argue that the state should focus its resources on the most qualified students in those programs that have the highest graduation and licensure pass rates. On the other hand, regional access to nursing graduates and increased diversity are probably enhanced by having a large number of programs, widely disbursed, and of varying sizes.

These need not be mutually exclusive points of view however. The state would be best served by multiple programs throughout the regions of the state as long as they had high quality and strong results. UNC and NCCCS should be provided additional resources to accomplish these goals and should be held accountable, within a reasonable deadline, of either getting all programs to meet acceptable standards or of eliminating programs that cannot do so. These standards should probably be higher than the State Board of Nursing’s minimum passage rate on NCLEX, which is 75% so as to maximize output. (Or the State Board of Nursing might consider raising that standard.) While UNC has a higher standard (85%), it has not enforced that standard.

12. The legislature should target resources for increasing the production of nursing graduates at the Associate and Bachelors level for that purpose.

Nursing education is one of the most expensive areas because of limits on certain class sizes (although these need to be carefully scrutinized to optimize enrollment). A legitimate case can, therefore, be made to increase the funding for nursing education in both the NCCCS and UNC funding formulas. Yet to do that alone would not guarantee that these resources will find their way to nursing programs because allocations to the institutions are not done on a line item basis. The legislature, then, would be well advised to make a special allocation for the specific purpose of increasing nursing graduates. This should be recurring funding with, perhaps, an accountability review of results after five years.

13. The Presidents of both UNC and NCCCS should meet together with healthcare CEO's on a regional basis to expand the availability of clinical sites. These meetings should be facilitated by the area AHECs.

An expansion of faculty, funding, and facilities will not necessarily lead to an increase in nursing graduates without an increase in clinical sites and clinical supervision. This has been a long-standing challenge and requires intervention at the highest level to bring about long-term solutions. It will be important to do this on a regional basis because nursing graduates tend to remain in the regions where they receive their clinical training.

14. UNC and NCCCS should target pre-college year round and summer programs at minority and female K-12 students to attract and prepare them to major in computing fields. The computer industries in North Carolina should help fund these programs, provide internships, and offer mentors.

As is true nationally, North Carolina has a dearth of female and minority students majoring in computer science. In UNC, for example, there were 790 Bachelors degrees awarded in 2004-2005. Of those, only 169 were awarded to women. Of the 790 Bachelors degrees in computer areas, 215 were awarded to Blacks (201), Hispanics (10), and American Indians (4). The projected gap between degrees awarded and positions available is 980 currently; that gap would drop to 528 if women earned the degree at the same rate as males. The National Science Foundation (NSF) has started a program called "Broadening Participation in Computing" and provides grants to institutions seeking to close the gap. The greatest gap in North Carolina is gender rather than race.

15. UNC and NCCCS should collaborate to design new academic programs (or concentrations) in computer related areas that have the potential to attract additional students to the field.

For example, a small number of institutions in both the U.S. and elsewhere have introduced "gaming" programs. Carnegie Mellon, for example, has a Center for Entertainment Technology and has developed a Masters in Gaming that links with the arts and entertainment fields (one of the emerging industries in North Carolina). In addition, UNC and NCCCS should insure that adequate options exist for students to major in management information systems (MIS) and in emerging specialty areas, such as computer security and the uses of computers in homeland security. Some of these degrees may attract a greater number of women and minorities into the field.

16. UNC should design a statewide, accelerated, Bachelors degree in computer science/information technology marketed to underemployed workers who already have a Bachelors degree in another field. This degree should be a consortial degree offered by a group of UNC institutions; should use e-learning to the extent possible; and the state should provide forgivable loans to the students sufficient to enable them to take the program "more than full-time". The degree should be awardable in twelve months. Whenever possible, major computer using companies should help in the design of the curriculum and in providing resources (for example, equipment).

A similar program was provided in Columbus, Georgia in collaboration with the state and with the Total System Company. Several hundred graduates were produced a year and Columbus now produces a very high percentage of its own computer graduates. The state provided \$10,000 forgivable loans.

17. The Presidents of UNC and NCCCS should form statewide (as widely representative of the regions as is possible) business advisory groups in each of the emerging areas:

- Advanced Manufacturing
- Advanced Materials
- Biotechnology and Pharmaceuticals
- Computing, Software, Internet
- Design and Film
- Logistics and Distribution

These advisory groups should include appropriate academic expertise from both UNC and NCCCS to insure a direct link to academic program development and collaborative UNC/NCCCS possibilities. Such groups will be essential to anticipate projected needs in these industries as traditional projection models are inadequate for this purpose (since they project based on ten years of previous employment; some of these industries, especially subsets of them such as nanotechnology, barely existed ten years ago). In addition, these groups can advise UNC and NCCCS on the design of the curriculum and the nature of the degrees, Associate degrees, and certificates (new interdisciplinary programs and degrees are likely to be required). Furthermore, they can provide a link between the industries and the research at the university level, seeking to increase the proportion of research produced that directly benefits North Carolina based companies. The groups will need to be nimble rather than bureaucratic and action as well as analytically oriented. For example, there is an emerging logistics opportunity around the potential development of a premier container terminal on a 600 acre undeveloped parcel on the West Bank of the Cape Fear River; a specific subgroup of the Logistics and Distribution Advisory Group should be tasked with examining this opportunity and the higher education needs it might require.

III. K-16 APPROACH

North Carolina does not have as comprehensive a K-16 approach to education as many other states.

Recommendations

1. North Carolina should form a statewide K-16 Council with membership from stakeholders of education at all levels, including business and industry. Pre-K, K-12, community colleges, public and independent universities should all be involved. The Council should meet quarterly and address issues that cut across educational systems (see, for example, items 2(i), (ii) below). Also, consideration should be given to establishing regional K-16 Councils. North Carolina should examine the models in

states like Georgia and Maryland (both of which have existed for over a decade and have been widely recognized for their leadership in this area), and in Ohio (which has just reconstituted and energized its K-16 approach).

2. The State K-16 Council should address the following issues as priorities:
 - (i) Reducing the need for remedial education in both NCCCS and UNC. The percentage of students needing remediation in both systems exceeds the levels that allow North Carolina to be globally competitive in the economic marketplace. The K-16 Council should adopt common definitions and common (or translatable) placement tools in both systems so that the real level of remediation needed can be measured (and so that students do not need to retake placement tests if they change systems). It should then examine best practices in other states, recommend appropriate programs, and establish measurable targets for reducing remediation. Special emphasis should be placed on reducing the need for remediation in Math because of the impact on technology-based employment.
 - (ii) Closing the achievement gap between majority and minority students, especially as it relates to graduation rates and the participation of minority students in math, science, and technology degrees. It is recommended that the K-16 Council seek legislative funding to secure external assistance in reviewing this issue and in developing programs based on best practices nationally.

IV. SIGNATURE PROGRAMS AT HISTORICALLY MINORITY INSTITUTIONS (HMI'S)

Background

HB 1264, item 6 states:

“With regard to the University System there shall be special emphasis on the development of signature programs for Historically Black Colleges and Universities (Elizabeth City State University, Fayetteville State University, North Carolina A&T State University, North Carolina Central University, Winston-Salem State University) and the University of North Carolina at Pembroke. In conducting the study, the consulting firm shall take into account that the General Assembly finds the Historically Black Colleges and Universities and the University of North Carolina at Pembroke to be institutions with important historical traditions and equally important contemporary purposes and, as such, are valuable and indispensable assets of The University of North Carolina and the State. The General Assembly intends to encourage the continued growth and development of those constituent institutions and would resist any suggestions to eliminate the historical function and purpose of those institutions.”

The six HMI institutions serve over 50% of the minority students attending UNC and have experienced extraordinary growth in programs, enrollment, and facilities since 1999, significantly assisted by the state's investments in the "Focused Growth Institutions" initiative. As the findings indicated in the Preliminary Recommendations document, "while the investment has been substantial the returns already appear to justify both the dollars and the commitment to these institutions". Furthermore, the Preliminary Recommendations suggest that "Other states have attempted to strengthen their HMI's, but it is hard to imagine any program that has been more successful than this one."

Nearly half of the new academic programs added to the HMI's since 1999 have been at the graduate level, and many of the programs have been in fields where there is a high state need. The emphasis on math, science, and technology has been particularly impressive and demonstrated the foresight of emphasis since these have emerged as areas of national priority.

Challenges

The findings contained in the Preliminary Recommendations document indicate that:

"The HMI's have considerable ambitions to continue to add new academic programs. This is understandable given their success to date. They are, however, experiencing some challenges as a result of the rapid growth, including managing the faculty recruitment and orientation process and managing infrastructure growth at the same time. Budget and tuition limitations may also impact their ability to secure additional programs, especially those that are high cost programs. Thus the selection of additional programs will need to be paced appropriately and selected strategically especially as it relates to responding to demonstrated high occupational needs."

These are among the fundamental challenges for the HMI's. They have momentum and must maintain that. Yet they will suffer setbacks if newly introduced programs falter. Overall, the quality of new faculty hires seems encouraging and several HMIs are actively seeking national accreditations (AACSB in business, for example) where they don't already exist. These activities will continue to need attention and resources. So, too, will the programmatic responses to President Bowles' challenge for improvements in retention and graduation rates.

Even with these cautions, however, the HMI's do appear to have the capacity to add a limited number of "signature programs" that will benefit both the institutions and economic transformation in the state if sufficient additional investments are made. The recommendations that follow result from extensive material review and two sets of intensive meetings with each institution's leadership, one in Chapel Hill and one during visits to each campus. "Signature programs" have been defined as those that are distinctive, that build on existing strengths, that advance the institution's profile, and that serve regional and/or state economic transformation needs.

Recommendations

1. Elizabeth City State University should have as its “signature programs” the partnership **Pharm. D.** program and an expansion of its **Aviation** program.

- **The Pharm.D. program** admitted its first class of 14 students in fall of 2005 as part of a single class of pharmacy students with UNC Chapel Hill. The program makes extensive use of sophisticated distance learning and appears to be off to a strong start because of the commitment to success by both institutions, a focus on quality, and significant dedication from the small core group of people responsible for the program. Much of the planning has been “just in time” planning because approvals came late in the cycle. In addition, the program has been launched in temporary facilities adjacent to the science building. Once again, Elizabeth City State University has paid attention to quality by making the temporary facility not only functional, but also relatively attractive. In addition, it has dedicated an information technology person to the program to insure sufficient support for distance learning and other technology activities.

The implementation of this program, then, has been a major undertaking, especially as the institution has an undergraduate emphasis and no previous experience with professional programs. The initial faculty hires seem to have contributed to the success of the program initiation, as has the experience and commitment of UNC Chapel Hill. Since this program is considered part of UNC Chapel Hill’s program and is thus accredited as a single program, there are real incentives for UNC Chapel Hill to insure its success. A planned and funded new building will be timely as additional cohorts of classes will begin to strain physical capacity.

While the program is off to a good start, significant issues remain to be addressed before it can truly help transform health care and, consequently, economic vitality in the region. The core rationales for introducing a Pharm.D. at Elizabeth City State University was to prepare pharmacists to work in northeast North Carolina and to increase the number of minority pharmacy graduates. Yet the initial class of 14 students includes only two minority students and only four students from the region (several students are from out-of-state). There are multiple, and understandable, reasons for this including the late approval; the admissions process; and the need to launch the program with a class that has high probabilities of being academically successful. Long-term, however, Elizabeth City State University has to establish a watertight pipeline of students. Thus even though there has been support for this program already, it is identified in this report as a “signature program” in need of deeper support. And this support will also need to be broader so that it can provide for pre-college and summer programs (maybe in collaboration with AHEC), marketing (many in the area do not have a full understanding of the richness of the pharmacy profession), intensive recruiting, and a further strengthening of the Bachelors degrees in math and science at Elizabeth City State University (most students entering pharmacy

already have a Bachelors degree). In addition, the state should consider a forgivable loan for students in the program who remain in northeast North Carolina to practice.

Another area that will need to be addressed for this program to realize its full potential is the availability of clinical sites. Students who not only come from the area, but also do their clinical work in the region are most likely to stay in the area. Yet as classes of additional cohorts of students are added, there are unlikely to be sufficient staff at clinical sites to provide the appropriate supervision. This requires additional planning, a clarification of roles and responsibilities (UNC, AHEC, ECSU, UNCCH, private sector), and resources to increase the availability of community based supervision.

Without these interventions of support, the program may still succeed on one level. However, it is unlikely to succeed at the most fundamental of levels: increasing economic opportunities for a region with significant needs.

- **Aviation Science** has existed in the Technology program at Elizabeth City State University since 1996 and has approximately 30 majors currently. There is considerable interest in the economic development community in the region for expanding the program. One aviation related company (Tamsco) already operates in the region; the Eastern Seaboard Coastguard operates from the region; the state Department of Transportation has interest in assisting the program; and there are several regional airports plus Norfolk airport within an hour of the campus. Employment opportunities exist in flying, maintenance, control operations, business services, and navigational systems, as well as in manufacturing.

Since there are relatively few such programs in the nation, and since it would take a significant increase in the size of the program plus additions to its majors and/or concentrations, Elizabeth City State University has wisely begun with a feasibility study, assisted by external expertise. This study should help guide the final program decision, design, and investment needs.

Elizabeth City State University, then, has the opportunity to build two very distinctive "signature programs." From a population and opportunity perspective, Elizabeth City State University is among the most challenged of the HMI's. Substantial success in these two programs, and the corollary build up of math, science, and technology capacity and aspirations in K-12 schools, would serve the institution and region well.

2. Fayetteville State University should have as its "signature programs" **Criminal Justice** and **Intelligence Studies**.

- **Criminal Justice** has a twenty-year history at the University. The Bachelor of Science Degree in Criminal Justice has a proven track record, with over 400 undergraduates in the department of Criminal Justice within the College of Basic and Applied Sciences. In February of 2006, the University of North Carolina Board of Governors approved the proposed Masters; the first cohort of Masters students will enroll in the fall of 2006.

Criminology has long been taught in academic departments, but in the last two decades interest in the subject has increased as the criminal justice system has expanded. Between 1982 and 1999, state, federal and local government expenditures on criminal justice increased by 300% and the number of persons employed by the criminal justice system nationally grew by 72%. Since 9/11, the rate of growth in the field has grown in exponential ways.

Given the quality of the program at Fayetteville State University and the growing demand for practitioners in the field, the University should consider the development of an online Masters of Criminal Justice for working law enforcement professionals who want to blend their practical experiences with the scholarship available to them through FSU faculty. Further, the University has interest in the development of the applied Doctorate in the field. This, however, would raise a question of mission and should only be considered after the Masters has been in place for five years.

- The Bachelor of Arts in **Intelligence Studies** would be a new signature program for the University. Fayetteville State University resides in close proximity to Fort Bragg and Pope Air Force Base. Fort Bragg, the home of the Airborne and Special Operations Forces, is an especially critical component of this country's army and defense strategy. Currently, the Army is undergoing a significant self-study concerning how it "will remain relevant to the challenges posed by the global security environment—across the range of military operations from regular conflict to high intensity conventional warfare—and ready to provide the focus and capabilities required by the Combatant commanders and the Joint Team." (Taken from *Our Army at War--Relevant and Ready--Today and Tomorrow*, November 2004). This translates into an opportunity for Fayetteville State University.

Fourteen years ago, Mercyhurst College established the first non-governmental multidisciplinary baccalaureate degree in Intelligence Studies. Lessons from Mercyhurst (and Embry-Riddle, which also has a program) should be helpful in the design of Fayetteville's proposed BA in Intelligence Studies, as both institutions offer both the Bachelors and the Masters program.

Fayetteville State University has the opportunity to develop a Bachelor's level program that combines a liberal arts core with foreign language requirements, internships, and intelligence-related courses as well as national and international studies. The program would be offered both in online and hybrid formats and would take advantage of the expertise resident at Fort Bragg and the library resources of the region. In the Fall of 2006, the University will offer Hindi, Pashto, and Chinese for the first time through partnerships with other universities outside the state and is currently looking for partners to provide Arabic.

Given the needs of the military and the needs of the intelligence community, FSU is well positioned to implement a "signature" program in this area. In addition to preparing students for employment in military intelligence and in entities such as the Central Intelligence Agency, the Department of Homeland Security, and the National Geospatial-Intelligence Agency, the program would prepare students for careers in business intelligence.

3. North Carolina A&T State University should have as its "signature programs" the innovative **University Studies** (general education) program and a **Public Health** program.

- **University Studies** is indeed a signature for North Carolina A&T State University in UNC and, perhaps, the nation. As noted in the Final Interim Report (see pages 54-57) North Carolina business and industry leaders, particularly those involved in emerging industries, have identified particular skills and knowledge that they need in 21st century professions. These include the ability to integrate different disciplines; the need to link theory with real world practice; the need for "soft skills" (for example, working in teams; effective communication; conflict resolution; resource management; cultural adaptability; and strong work ethic); and the need to think system and see the big picture. Interestingly, North Carolina A&T State University's revision of its general education program, called University Studies, that will be implemented in the Fall of 2006, anticipates these needs.

The purposes of the University Studies program are to develop in all students:

- ✓ broad-based critical thinking skills
- ✓ effective written and communication of ideas
- ✓ appreciation for diverse cultures
- ✓ commitment to ongoing civic engagement and social responsibility

The design of the program is extraordinarily impressive, placing the needs of students foremost and being intentional about student intellectual development. Most general education programs in the nation continue to be primarily a menu of traditional courses. Yet North Carolina A&T State University describes its developmental model this way:

“Conceptually, the University Studies curriculum represents all intentional developmental processes focused on introducing basic inquiry, discovery, and critical thinking skills in the freshman year, strengthening analytical and problem-solving skills in the sophomore year, deepening those skills through coursework in the major during the junior and senior years, and ending with an interdisciplinary, integrative capstone experience in the senior year. At each of these levels, coursework and experiences outside the classroom should build and reinforce critical thinking and communication skills, social responsibility and ethical decision-making, and appreciation and understanding of diverse cultures.”

This comprehensive approach, including theme based/interdisciplinary courses, culminating in a senior capstone experience (which can include such activities as internships, foreign study, and community projects), will impact every single student. This is an unusual feature for a signature program.

North Carolina A&T State University needs to be supported and rewarded for its innovation and courage. While the faculty have done an exceptional job in designing, approving, and establishing the program, they will need faculty development support as the program is implemented. This is a very different type of teaching than most have been prepared for and have experienced. Furthermore, the success of the program is likely to be enhanced through the ability to hire a core of new faculty who do have such experience and preparation. Not only will these new faculty hires strengthen the University Studies program, but they will also likely contribute to the improvement of retention and graduation rates. This is likely to occur because the new curriculum will engage students in active learning to a much higher degree than traditional curricula. Also, some additional faculty lines will reduce the student-faculty ratio, which should allow more faculty-student engagement (a major factor, according to research, for student retention).

Support for this “signature program” will be an investment, since there are lessons to be learned and best practices to be gleaned as other UNC institutions revisit their own general education programs and the general skills and knowledge required in their majors (as called for in recommendations II.C.2,3). And, if successful, University Studies may give A&T graduates a competitive edge in employment, based on what employers say they need in graduates to help them transform North Carolina’s economy.

- **Public Health** is a “signature program” desired by North Carolina A&T State University. The University sees opportunities to build on its traditional strengths in agriculture and its recent investments in faculty and lab staff in biology and chemistry. The primary focus to date has been on developing a research agenda, with special emphasis on health disparities. Opportunities also exist in emerging areas such as food safety, nutrition and environmental impacts.

Academic programs in public health do not currently exist at North Carolina A&T State University and would need UNC approval. (There are existing programs in UNC but none that significantly address the shortage of minority students in the field.) The initial plan centers on certificate programs and, potentially, a Masters degree. While many existing courses could be utilized, a number of new courses (and, therefore, faculty) would be required.

Healthcare and public policy on health contribute to economic development: good schools and good healthcare are essential ingredients in attracting or retaining companies. North Carolina A&T State University has begun its investments in this area and believe they can sustain the program development even with the recent departure of the Chancellor and Provost.

- A few further comments are in order. North Carolina A&T State University is the most mature graduate and research institution of the HMI's. It has had three Ph.D. programs in the engineering area for some time and has recently introduced two interdisciplinary Ph.D.'s that have considerable appeal. Yet its undergraduate/graduate ratio remains predominantly undergraduate (approximately 90%/10%). To capitalize on its Carnegie classification and its graduate programs, North Carolina A&T State University needs to grow the size of its graduate population substantially. Because North Carolina does not provide tuition remission for graduate students, North Carolina A&T State University would benefit from a specific state investment in its graduate student funding to accelerate this growth.

North Carolina A&T State University is also well positioned to grow programs in some of the areas identified as emerging industries; however none yet appear to qualify as areas for "signature programs." Also, A&T has explored requesting a professional program in veterinary medicine. However, the projected gap (27 positions annually) is a modest one and would not justify the cost of such a program (the least expensive program in the nation is \$12M a year; start-up costs are substantial, in the \$40-\$95M range).

Many states do not even have a veterinary school (28 total in the nation); only Alabama has two. Yet the participation of minority students nationally in vet schools is unacceptable. After Tuskegee at 42.1% black, the next highest percentage is 3.9%. North Carolina State University has the seventh highest percentage but is only at 1.3% (2003 data), which represents four students. UNC General Administration should work with North Carolina State University and the other HMI's to identify ways to remedy this situation, short of creating a second vet school.

North Carolina A&T State University has great potential to develop a national signature as an institution that truly integrates interdisciplinary learning in both its general education and majors, with the potential to become a national model. Thus University Studies, along with consideration of Public Health, can continue the impressive momentum at the institution.

4. North Carolina Central University should have as its “signature programs” **The BRITE (biomanufacturing)** program and the emerging **Homeland Security** program.

- **The BRITE Program (Biomanufacturing Research Institute and Technology Enterprise) for Biomanufacturing** has great potential for NCCU and the state of North Carolina. Launched with a \$19.1M grant from the Golden Leaf Foundation and supported with operating funds from the legislature, BRITE aims to provide degree programs and research in biotechnology (particularly biomanufacturing). North Carolina has the third largest number of biomanufacturing jobs in the nation (after California and Massachusetts) and is adding several thousand such jobs a year. Through the Golden Leaf Foundation and the biotechnology industry, \$64.6M has been invested to train biotechnology workers. In addition to NCCU, North Carolina State University received \$36M to develop a pilot scale biomanufacturing plant, and the community colleges received \$9.4M for workforce training. BRITE at NCCU builds on the existing strength of the Biomedical/Biotechnology Research Institute (BBRI), a largely grant funded research operation.

BRITE will enroll its initial class of 40 students in the fall of 2006 and aims for an enrollment of 200 students by 2010. NCCU will provide 10 of the initial students with scholarships so as to attract a strong class. Initially the undergraduate program will provide concentrations (such as biopharmaceutical sciences) in Biology and Chemistry majors. Certificate programs are also planned. NCCU brings some unique interdisciplinary assets to the new programmatic thrust, especially as it has a longstanding Law School (for example, intellectual property law has implications for biomanufacturing) and a business school (although it needs to complete its AACSB accreditation).

NCCU has also clearly made BRITE faculty hiring a priority. The initial seven faculty have excellent backgrounds, all with Ph.D's from major institutions and several with extremely relevant industry experience (for example, with Eli Lilly Company), as well as prior research activity. The Director has worked extensively in the industry and also as Director of Lead Discovery, Laboratory for Discovery in Neurodegeneration at Harvard.

It would be wise for UNC and the state to invest further in the success of BRITE and to be sure it is able to add quality faculty. There will likely be a demand for a Masters level program, which should be developed once the Bachelors program is in place and has graduated a class.

NCCU has considerable ambition to add Doctoral programs. This ambition is best explored through the upcoming mission review process as Doctoral programs at other than major research universities rarely have a direct impact on economic development. However, should the mission review process support this mission change, a Ph.D. in Biomanufacturing would be a natural choice.

Much has already been invested in NCCU's biomanufacturing direction. UNC would be well advised to continue that investment rather than to support duplication in biomanufacturing (as distinct from biotechnology), at least until the BRITE program is fully established.

- The emergence of **Homeland Security** as an academic area for both teaching and research provides NCCU with a unique opportunity for a "signature program." With an established and large criminal justice program; an investment of focused growth funds in developing an Institute for Homeland Security and Workforce Development; and an ability to bring interdisciplinary links (such as bio and computer forensics), NCCU has the potential to develop not only undergraduate concentrations and degrees, but also a Masters degree. Furthermore, there are likely to be extensive opportunities to provide training (perhaps some of it on a contract basis) and to conduct externally funded research. While faculty hiring has begun, and has yielded some excellent results, more hires will be necessary for the program to reach full potential.
5. The University of North Carolina Pembroke should have as its "signature programs" **Teacher Education** and an **Allied Health Professional Degree Program in Physical Therapy**.

- **Teacher Education** has historically been at the core of Pembroke's mission. Founded in 1887 as a normal school to train American Indian public school teachers, Pembroke has emerged from an institution of 15 students and one teacher to 5,632 students and 237 faculty. Until 1953, Pembroke was the only state supported four-year college for Indians in the nation.

Today, of the 2,400 American Indians who attend a UNC institution, 1,100 are enrolled at Pembroke. As 23% of Pembroke's current student population is African American, Pembroke is among the most racially diverse campuses in the University of North Carolina. Pembroke generates considerable teaching graduates, most of whom remain in Robeson County and serve the community.

The current curriculum for teacher education majors is comprised of four components: General Education; Specialty Area (Major): Professional Studies and Content Pedagogy. The culminating professional development experience for prospective teachers is the senior internship (student teaching) under the direct supervision of a master teacher in a clinical setting.

Given the predominantly rural nature of the Southeast Economic Development region in which it resides, Pembroke's historic strength in producing teachers, and the low graduation rates of high school students in the region, there is an opportunity to collaborate more assertively with the nearby community colleges and K-12 schools to develop a pilot program for a K-16 approach to education with particular emphasis on the STEM disciplines. (See earlier recommendations in K-16 Approach section of the Final Report.)

- The demand for professionals in the **Allied Health Professions** is palpable, most especially for physical therapists. Subject to the deliberations of the proposed recommendation creating a joint UNC/NCCCS Task Force on Allied Health programs delineated in Section II.B. of this report and once the nursing program is further developed, consideration should be given to Pembroke for its second signature program to be a **Physical Therapy** degree. Because of the change in the entry-level of the degree to Doctoral, a mission change would have to be approved first.

Currently Pembroke has a strong track record in the biological sciences and nursing. A new building is being constructed to house an expanded nursing program. In addition, the campus boasts an Athletic Training Education Program that is in the third year of candidacy with the Committee on Accrediting Allied Health Education Programs. State-of-the-art clinical settings exist for the Athletic Training Program and may be considered as part of the development of a broader allied health program at the University if the campus is approved for the Doctor of Physical Therapy Degree.

As this would be the first Doctoral granting degree program at the University, careful, focused planning would need to be undertaken at the institutional level to ensure that the investments required would not be a burden for the institution from a fiscal and human resource perspective. More specifically, the funding for the initial facilities investment would need to be budgeted at the state level and the current funding formula for professional degree programs analyzed to ensure that a start-up physical therapy program would be financially viable and not drain the financial resources of other critical, high demand degree programs currently offered.

6. Winston-Salem State University should have as its “signature programs” **Physical Therapy and Nursing**.

During the past six years, the Chancellor has intentionally focused the institution’s program offerings in Nursing, Physical Therapy, Clinical Laboratory Sciences and Rehabilitation. At this juncture, the incumbent is leaving to assume a new role within the General Administration. There is a new Provost and a cadre of new Deans. Much of the momentum built on campus for academic program excellence will need to be shepherded by the Interim Chancellor, in consultation with this new academic leadership team while the search for a permanent Chancellor is underway.

- The School of Health Sciences is poised to offer the Doctor of **Physical Therapy** Degree in 2007. This change is in concert with the expanding role of physical therapy practice and with the national trend of offering the Doctorate in Physical Therapy (DPT); such a change may require a mission adjustment. At the conclusion of 2005, an estimated 135 of the 209 (67%) accredited physical therapy programs offered the DPT and all but 7 programs indicated their intent to plan for the DPT. In order to remain competitive, Winston-Salem State University proposes two tracks: the entry level (e-DPT) and the transitional level (t-DPT) degree.

The e-DPT would prepare graduates to appraise scientific literature and conduct clinical research in support of physical therapy interventions. The program would be completed in 36 months rather than the current 30-month program for MPT students. The t-DPT program would be designed for practicing Physical Therapists who wanted the DPT degree. This particular curriculum would combine distance learning and web-based instruction to accommodate the clinical practitioners.

- Winston-Salem State University stands to become one of the UNC's "signature programs" in **Nursing** if it is enabled both from a facilities perspective and a human resource perspective to introduce a significant research component into its nursing program. The Division of Nursing is accredited by the Commission of Collegiate Nursing Education and is approved by the North Carolina Board of Nursing. For a considerable period, WSSU's nursing graduates have had strong pass rates on the licensure exam. There are more than 3,000 graduates of the nursing program.

Nursing options at WSSU provide access to both traditional and non-traditional learners. Program options include the traditional option for generic, transfer and second-degree students, RN to BSN, LPN to BSN, Paramedic to BSN, Accelerated BSN, and the Master's degree with a concentration as a Family Nurse Practitioner. The Division of Nursing also provides distance learning at several off-campus sites including Murphy, North Carolina.

As faculty members in the Division of Nursing are already committed to partnerships in the community that bring health education and health care services to the citizens of Winston-Salem and the surrounding region, it would benefit the state to invest in a pilot program to develop collaborative programs with the community colleges (See Recommendation #9 on page 13) to increase the number of nursing graduates and to expand WSSU's research component to promote healthy communities.

7. UNC should create a single STEM (Science, Technology, Engineering, Math) summer pre-college program offered by the six HMI's working together collaboratively.

The focus growth initiative impressively targeted STEM disciplines for growth at the HMIs. For these programs to continue to grow, however, the pipeline of students must be expanded. The program should have two elements: one aimed at K-12 students and one aimed at STEM K-12 teachers. In both instances, state and private funding should be sought to offer scholarships. The program design should be facilitated by the General Administration Office of Academic Affairs, and there should be insistence that it be a single program, so as to increase collaboration among the HMIs. There are likely to be more and more general grant dollars available to assist with funding the programs as STEM areas have become a national priority; specific grants are also likely to be available for programs that target minority students in these areas.

Summary

The total number of “signature programs” recommended (12 at 6 institutions) is relatively small. They are also mostly an expansion or repackaging of existing programs or areas of strength. In addition, many have major interdisciplinary elements. All of this is appropriate given the goals of HB1264 to develop “signature programs” that will enable “the continued growth and development of those constituent institutions.” Support for these programs should assure that the momentum continues. These programs all have direct ties to the economic transformation of either the state or a region of the state. The HMI’s will also, through the normal processes of UNC, be able to explore additional program development and/or mission changes. They can also benefit from other initiatives to respond to projected gaps in teaching (particularly so given the historic origins of several of the HMI’s), nursing (for example, an RN to BSN program at ECSU), and computer science. At the same time, they will all benefit from the renewed emphasis on strengthening retention and graduation rates.

These recommendations do not include dollar amounts. First, UNC must determine if it accepts these recommended “signature programs.” Where it does so, it will need to work collaboratively with the institution on developing an acceptable budget proposal. In quite a few instances, the institutions are either awaiting the conclusion of a feasibility study or need further time to develop the specifics of a proposal (since a number of these proposals “firmed up” as a result of interactions around this study). However, more developed proposals could be finalized well before the next budget cycle begins.

V. DISTANCE LEARNING AND FACILITIES

Distance Learning

Background

HB 1264, item 5 calls for “recommendations on increased effectiveness through collaboration and distance learning.” Distance learning has a long history in American higher education, including such delivery methods as itinerant faculty, correspondence courses, and off-campus delivery sites. Technology use has also been part of that history, from audio systems, to one-way then two-way compressed video systems, to video conferencing. The advent of e-learning via the Internet has been perhaps the most significant technology advance for distance learning as it permits any time any place learning. In addition to pure distance learning, there are also hybrid forms of higher education where part of the program is on-campus and the rest is provided via distance learning.

North Carolina higher education has made extensive use of all forms of distance education. As a state with a significant rural population and substantial numbers of displaced workers, North Carolina has much to gain from supporting a vigorous distance learning approach to higher education. For many years, the legislature has funded

distance education in general and has, in particular, supported specific collaborative ventures in distance learning between UNC and NCCCS, most notably the 2 + 2 online program in teacher education. Both UNC and NCCCS show substantial growth in the number of courses, academic programs, and students using distance education since 1999. Most of the UNC courses and programs are institution-specific, although they may be offered statewide; under a third of student credit hours in distance learning are generated in online distance education, and over half the online degrees offered are at the graduate level. Approximately 15% of the NCCCS online courses have been developed at the state level through faculty teams, 5-10% are commercial products, and the balance have been developed locally by faculty.

Challenges

Distance learning in North Carolina faces a number of challenges.

- Policy and funding decisions are currently hampered by the lack of common definitions and common data approaches, both within and between the two higher education systems. For example, what exactly constitutes “distance learning”? What is e-learning (or online learning)? Definition differences lead to data that are difficult to compare across the two systems.
- Distance learning, particularly online, in North Carolina is not currently operating in a highly planned environment, either in UNC or in NCCCS. This is not entirely unexpected as many states have begun their online efforts with more encouragement and incentives than with programmatic planning. This can, however, lead to significant unevenness in the availability and quality of both courses and programs. Furthermore, it can also lead to duplication and, therefore, to the loss of one potential advantage of online programs. In UNC, for example, while the overall number of programs appears impressive, a very substantial proportion of those programs are through the initiative of East Carolina University. There is also considerable unevenness among the community colleges. Both systems have duplicated online programs within their systems, and there are additional opportunities for online collaborative programs between the systems. The full effectiveness of distance learning is unlikely to be realized in North Carolina without more robust planning within and across the two systems (with connectivity to the recommendations of the E-Learning Commission, which are primarily focused on K-12.)
- Distance learning growth using technology-based instruction will likely be constrained by the infrastructure. UNC’s bandwidth comes from the North Carolina Research and Education Network (NCREN) and is adequate at the current time but may become an issue if the demand increases, which is likely. NCCCS utilizes T-1 data connectivity, funded by the System office; some community colleges augment bandwidth either with local funding or contracting with a local Internet service provider. At peak periods, NCCCS is already close to capacity. With already planned additional activities and initiatives, NCCCS faces major infrastructure challenges.

Recommendations

1. A joint committee from UNC and NCCCS should establish common terminology and definitions. It should also establish common data definitions and reporting requirements. Wherever possible, both the terminology and data definitions should allow for national and regional benchmarking.
2. Both systems should engage in comprehensive strategic planning for distance learning, with special emphasis on online degree programs. The planning in both systems should be integrated or connected to maximize collaborative efforts.
3. NCCCS should engage a consultant who specializes in technology infrastructure planning to prepare a plan to assure that the community colleges have the necessary bandwidth to expand online offerings. UNC should be consulted during this planning to see what possibilities exist for a shared solution. The legislature should make the funding of this plan a high priority, higher, for example, than any single facility funding item.
4. UNC General Administration should take a greater leadership role in online degree programming and marketing, with special emphasis on programs to meet the economic transformation needs of North Carolina.

While UNC General Administration has facilitated and incentivized some of the online academic program activity, it does not appear to have been particularly intentional in working with institutions to develop a program array and there have been only a modest number of collaborative online degrees (such as UNCW and UNCC online RN-BSN and NCCU and ECU Masters in Library Science). For example, rather than multiple institutions offering a particular online degree (such as nursing), it might be a better strategy to have a single online collaborative degree (which could also be linked to a NCCCS Associate degree). This would also simplify marketing of online degrees.

5. NCCCS should also take a greater leadership role in expanding online Associate degree offerings.

There are approximately 20 such degrees available currently. The plan enumerated in recommendation 2 above should include prioritizing future online degree offerings again perhaps through the collaborative efforts of several community colleges. The top priority should be given to programs that would respond to high state need, as identified in this study.

6. NCCCS should request from the legislature recurring funding to support a minimum of one instructional designer at each college and a core team of instructional designers in the system office.

Without instructional design support, it is unlikely that sufficient numbers of NCCCS faculty will be able to develop robust online courses at the rate required to expand statewide and local offerings.

7. UNC and NCCCS should make online degree programs as seamless as possible for users. They should pilot one joint degree program that has a single registration process (online) and a single e-rate tuition.

There are many complications administratively with collaborative programs (both within and between systems), including tuition rates, fee payments, and assignment of student credit hours. This pilot program would help assess whatever a totally student friendly approach is feasible, where a student pays a single tuition rate and has seamless registration (even if registering for courses taught by more than one institution).

8. Both UNC and NCCCS should establish system-wide distance learning portals; these should be linked to one another. The legislature should fund the development of both portals.

A key element in maximizing distance learning, including online learning, is marketing. If students have to search out opportunities through the 16 UNC and 58 NCCCS institutions, they may not persevere nor may they ultimately find the right match for their program needs. It would be ideal if students could register and perhaps even pay tuition online through the portals. The portals should include special links to information about high demand occupations and the educational path to follow to enter those occupations.

Summary

Distance learning will be a crucial tool in North Carolina higher education's response to a distributed population. Both UNC and NCCCS institutions have considerable experience in providing education at a distance and are increasingly utilizing online learning. However, while both UNC and NCCCS have helped with the facilitation of distance learning, both system offices should engage in comprehensive strategic planning for distance learning with links to each other's plans. These plans would include, among other topics, the identification of programs, the increase in collaborative degrees, the examination of infrastructure (both technology and off campus sites), and the use of electronic portals for marketing and services. Both system offices would, therefore, take a more prominent leadership role in the coordinated development of a statewide and regional distance learning strategy.

Facilities

Background

HB 1264 stipulates that "an analysis of and suggested updates to existing long-range capital plans of both the University and Community College System that will address land acquisition and facility needs to support the program recommendations identified in

this study, taking into account opportunities for modernization of and new uses for existing facilities” be undertaken. From the inception of the study, the decision was made by the UNC/NCCCS Study Team to defer the engagement of a facilities planning consultant until this final report was delivered. The decision was based on the costs and efficacy of conducting a “wish list” study of construction and renewal and replacement needs before the program gap analyses were conducted and to ensure that the facilities planning needs would be in sync with the emerging strategic plans of the two systems and the mission review of the University of North Carolina’s 16 constituent institutions that is to take place in the academic year 2006-2007.

Challenges

In 2000, North Carolina voters approved \$3.1 billion in bonds for the backlog of repairs and new construction at the state’s universities and community colleges. Despite this record-breaking infusion of resources, financial support for repairs and maintenance has not kept pace. Consequently, the deferred maintenance bill for the 16-campus University of North Carolina alone is currently reported to be \$1 billion and that of the 58-member Community College System is reported to be \$357 million. In addition to this renewal and replacement activity, there is need for new construction to keep these institutions competitive and to provide the adequate space to attract and retain a growing student population at both the university and community college level. It is unlikely in the current fiscal climate that another major bond can be proposed and, unfortunately, there is likely a public perception that the facilities problem was “fixed” by the 2000 bond. Without another major bond, North Carolina will clearly have to set priorities for annual capital funding. Included in those priorities has to be annual maintenance funding for the facilities. Too often this funding has had to be absorbed primarily by the operating budgets of the institutions, as the 1993 law that the state’s General Assembly enacted to provide a minimum sum annually to all governmental agencies equal to 3 percent of the current replacement value of each state building has not been applied (although the most recent short session budget did include funding for higher education facility renovation).

Recommendations

1. North Carolina should review the existing inventories of current higher education facilities, analyze the utilization of these facilities, and maximize the utilization of existing facilities.

Given the funding constraints, higher education must be more efficient in its use of current facilities. In addition to the underutilization of campus facilities at many hours of the day, many other facilities are single purpose when they could have multiple uses. For example:

- Extension Offices. UNC has extension offices in every county in North Carolina. Many of these have conference rooms or other facilities and/or technology that could be adapted for additional educational uses, such as sites for distance learning instruction or testing or for seminars or workforce training.

- AHEC Facilities. These nine area education sites could also be adapted for additional educational uses, most logically in the expansion of nursing and allied health programs cited in this study.
 - Public Libraries. The 379 public libraries (64 central libraries and 315 branches reported in 2002-03) have missions consistent with higher education and are usually very accessible to local community members. They often have areas or rooms that could be used for instruction. In addition, they have technology available for online learning.
 - K-12 Schools, UNC Campuses, and NCCCS Campuses. In many instances, these sites are used exclusively for students in their own sectors with minimal consideration for more general educational uses. This provincialism leads to expensive underutilization.
2. UNC and NCCCS should work together to identify whether additional higher education sites are needed, and, if so, where those should be located.

There has been considerable interest in several locations about creating new higher education sites, often in conjunction with an existing facility that is available. Rather than respond to these interests, UNC and NCCCS should analyze the strategic needs of the state based on data and geographic access considerations. Where there is a demonstrated need, the establishment of a center should be developed on the following principles:

- Providing collaboration among two or more institutions with special emphasis on UNC and NCCCS collaborations.
 - Offering academic programs in high state need fields.
 - Serving a geographic area underserved by higher education and/or underserved socio-economic population.
 - Identifying strategic partners, with special emphasis on those that contribute facilities or financial facilities.
 - Offering high quality academic programs in flexible formats.
 - Maximizing the use of technology for instruction and support services.
 - Providing superior support services to students, including career counseling.
3. North Carolina should rank the adequate funding of a distance education infrastructure (see recommendation A.3 on page 31) as the highest priority new “facility need” for the state before any “bricks-and-mortar” request from either system.

4. UNC and NCCCS should both examine their current inventory of capital requests and prioritize those requests with the highest priority being given to facilities that expand capacity in those fields identified as needing expansion in this HB 1264 study, including the emerging fields*.

For example, space availability is a constraint on expanding nursing programs. The same is true of allied health and some other professional fields, and new areas, like nanotechnology, have very expensive facility and equipment requirements. This reprioritization will be controversial as some other existing needs may well be urgent (such as classroom facilities) and a case can be made from an economic development vantage point for facilities that enhance the attractiveness of a region (such as fine arts and performing arts facilities). Nevertheless, if the state has limited capital resources it must prioritize, and the economic transformation of the state has to be at the top of that priority list. Within those priorities, special attention should be given to the capital needs to support the high-demand fields at the HMIs.

5. North Carolina's business and industry that would directly benefit from the increased output of graduates cited in 3 above should be challenged to provide a portion of the funding (for example, the state would pay for the buildings; business and industry would pay to equip the facilities).
6. North Carolina should, as a matter of good public policy, make annual maintenance funding its highest capital funding priority.

One of the consequences of the 2000 public bond is that there has been an intense period of building, meaning that these buildings (and those renovated) will all "grow old" together. If the state is not intentional about a significant annual allocation for maintenance, the state will face a major crisis in the future. Indeed, the magnitude of need for the 2000 bond was caused by the state not having had a regular method of building maintenance. This annual funding, then, while not as visible as funding new facilities, must be the first call on available capital funding resources.

7. North Carolina should consider establishing an endowment fund over a period of time that, long-term, could provide regular annual capital funding without impacting the state's indebtedness.

In Texas a 1984 amendment to the Texas Constitution allowed the legislature to create a dedicated Higher Education Fund (HEF). The goal of HEF is to reach \$2 billion dollars, at which time 90% of the annual investment income will go to higher education facilities funding (the other 10% of investment income will be added to the endowment). To date, the state is about a quarter of the way to the \$2B goal. This is a

* teaching, nursing, computer science and the emerging fields (Advanced Manufacturing; Advanced Materials; Biotechnology and Pharmaceuticals; Computing, Software, Internet; Design and Film; and Logistics and Distribution)

proven methodology in Texas because the University of Texas and Texas A&M are currently the beneficiaries of annual, primarily facilities funding that are derived from an \$8.1B endowment (the distribution for FY 2005, for example, was \$341M) resulting from land grants in 1876 (some of which had oil on them!). The 1984 amendment aimed to create a similar funding source for all other higher education in the state. This approach probably diminishes the amount annually available for capital funding but long-term removes higher education facility funding from the constraints of the state's indebtedness.

Summary

While one of the original intents of HB1264 may have been to develop another major bond proposal, these recommendations reflect current fiscal realities. For that reason, the recommendations focus on maximizing current resources; emphasizing technology infrastructure as a capital need; establishing on-going maintenance as the highest priority for annual facility funding; urging that facilities related to high state need programs be placed at the top of the priority list; and suggesting the long-term establishment of a state higher education facilities endowment.

VI. RESEARCH, TECHNOLOGY TRANSFER, ECONOMIC TRANSFORMATION STRUCTURES, REGIONAL PARTNERSHIPS, AND RURAL ECONOMIC TRANSFORMATION

A. Research

Recommendations

1. North Carolina should create an "innovation model" and invest state dollars in one or more specific research areas.

This innovation model should be designed after studying the "best practices" in several other states (California, Arizona, Georgia, and New York). It should be built on areas of proven UNC research strength in such areas as nanotechnology and high performing computing. Furthermore, it should emphasize an interdisciplinary focus, involving multiple campuses and economic development regions. Consideration should be given to areas where a workforce development component can be established, thereby involving the community colleges (as happened in the biomanufacturing initiative). Any successful innovation model will require the active involvement by business and industry in its development.

2. North Carolina should establish a state matching research grant program to incentivize faculty collaboration with North Carolina business and industry.

This grants program should be modeled on those such as the University of California Discovery Grants Program. The emphasis needs to be on faculty interaction with North Carolina business and industry. While UNC is considered one of the national leaders in research, its impact on North Carolina business and industry is surprisingly low. A grants program would not only involve faculty, but it would also develop links with graduate students and post-docs; these links, in some instances, could develop into mutually beneficial employment opportunities. North Carolina business and industry would benefit from direct access to UNC intellectual assets, thereby increasing their company's R&D capacity and accelerating commercialization of intellectual property.

B. Technology Transfer and Economic Development

Recommendations

1. North Carolina should invest matching funds in a proactive, market-oriented, university-wide technology transfer program. The funding should be provided on a regional basis, preferably to a consortium of UNC and, where applicable, NCCCS institutions.

This program should provide resources to support UNC, and, where appropriate, NCCCS in the management of intellectual property, technology transfer, and economic development program activity. The funding should provide:

- Staffing and program support
- Facilities and equipment
- Infrastructure management systems

The state funding should be on a 2/1 state/local matching dollar basis (the local could come from multiple sources, including system or institutional funds; regional economic development funds; business and industry; other private sources; and/or grant dollars). Since the funding should be provided to regionally-based consortia, each economic development region should develop goals and objectives for this funding, with an accountability system of performance-based metrics that measures commercialization impact of intellectual property on economic development and the effectiveness/return-on-investment of other funded activities. Wherever possible, the higher education consortium and regional economic development organization should agree on the priority cluster economic areas for investment.

2. UNC and, where applicable, NCCCS should be authorized by the legislature to utilize state funds for investing in innovative technologies, in commercialization studies, in regional incubator centers, and in venture capital investments in higher education spawned North Carolina start-up companies.

These investments in emerging North Carolina companies and technologies that have links to North Carolina higher education could have significant returns for the state and its economic development regions. Early-stage technology could be supported through the build-out of “pre-beta test” models, thereby facilitating licensing and attracting outside equity capital. Commercialization studies (see Massachusetts Technology Transfer Center) allow for authoritative assessments of the market potential of university technologies and can be used as the basis for marketing licenses or attracting outside equity capital. Incubators have proven to be successful in North Carolina and other states. It is recommended that, in cooperation with NCCCS, UNC establish a minimum of one incubator center in each economic development region of the state. In urban areas, these could be in partnership with the private sector. In rural areas, they will likely require state subsidy. Venture capital funds provided by the state have proven to be valuable investments in some states, and North Carolina would benefit from having such a fund targeted at the emerging industry areas.

(For full report, “The Impact of Technology Transfer on Workforce Needs in North Carolina,” see pages 40-47 of Preliminary Recommendations document dated February 1, 2006.)

C. Economic Transformation Structures

Recommendations

1. UNC and NCCCS should jointly establish a one-stop, higher education economic transformation office. This office should include an electronic portal of the two systems’ intellectual assets targeted at economic development opportunities (with e-links also to the regular academic programs of both systems).
2. The joint higher education economic transformation office above should work with the institutions to identify, package, and market emerging academic fields. For example, North Carolina has significant assets in areas like nanotechnology, but states like New York have been more aggressive in funding, packaging, and marketing these assets.
3. In addition to the K-16 recommendations, UNC and NCCCS should build on the recent initiative to increase collaboration through a joint cabinet by forming a joint committee from the two boards. The joint committee should:
 - (i) Facilitate and provide oversight to the multiple current collaborative activities and to these recommended in this study.
 - (ii) Publish an Annual Report, in a consistent format, for the General Assembly and the people of North Carolina detailing collaborations.
 - (iii) Prepare joint budget requests for collaborative activities to be presented to the respective boards and then to the General Assembly.

While economic transformation would be one focus of the joint committee, it would not be limited to that topic.

D. Economic Transformation and Regional Partnerships

Background

North Carolina and other states expend considerable resources to promote economic development. Like most states, North Carolina has an executive branch division, the North Carolina Department of Commerce (DOC), that is legislatively charged with operating programs to improve the economic well being and quality of life for all North Carolinians. This agency operates several programs to attract new businesses and jobs to the state and coordinates these initiatives with other state agencies and with the higher education systems in North Carolina. For about three decades, specialized job training programs operated by the North Carolina Community College System have been closely coordinated with business expansions that are promoted by DOC. The University of North Carolina also has programs that promote economic development, particularly through its two land grant universities.

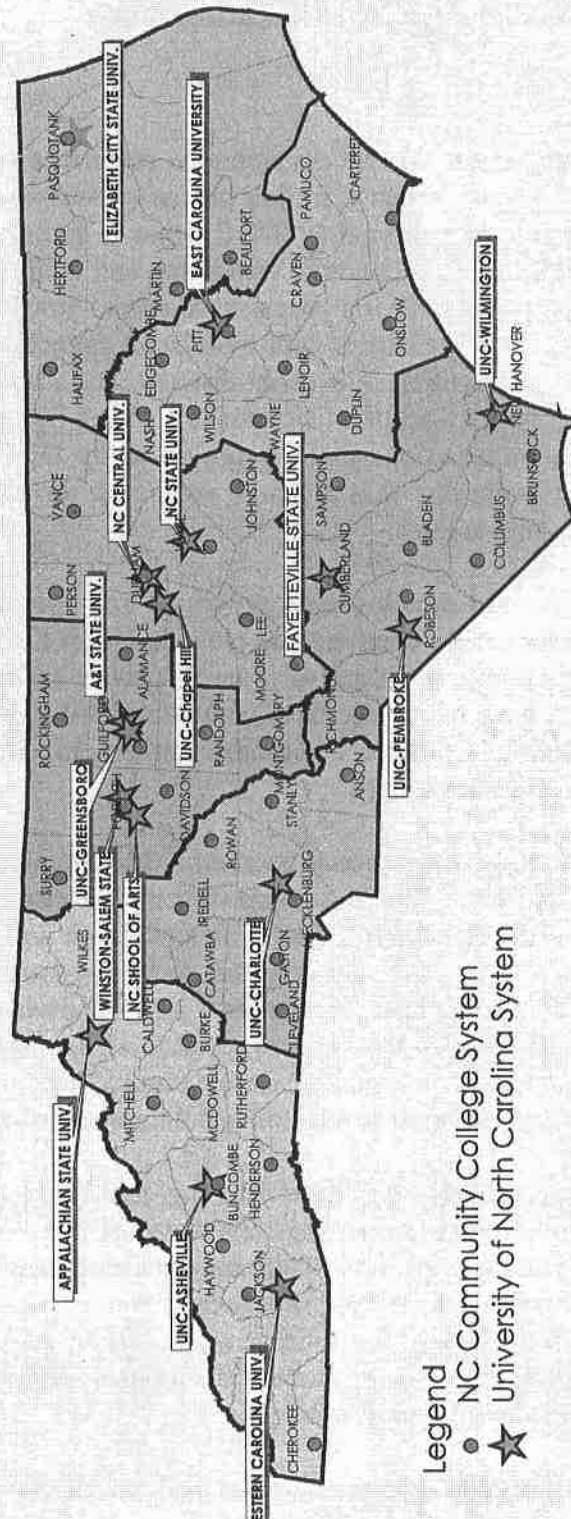
Other public sector economic development programs are operated at the local and regional levels. Most of the larger counties and cities in North Carolina have economic development programs. In addition, a number of larger private sector businesses, such as utility/energy companies, have economic development units that work closely with the North Carolina Department of Commerce and other entities, including higher education institutions, as new businesses are sought.

Starting in the early 1990s, seven regional economic development organizations have been created in North Carolina. The first group of these developed in the three major urban areas of the state – the Research Triangle area (Raleigh and Durham), Charlotte, and the Piedmont Triad. These were and continue to be predominately private-sector funded and governed. A few years later, legislators from rural parts of the state promoted and funded regional partnerships in the western, northeastern, and southeastern parts of North Carolina. The most recent regional economic partnership entity was created as a part of the Global TransPark initiative in Kinston and the surrounding region.

Each of the partnership programs is delivered on a regional basis. North Carolina's 100 counties are divided among the seven partnerships, with the number of counties in each ranging from 11 to 23. The primary goal of the regional partnerships is to market their regions, particularly to businesses seeking to relocate or to expand their operations. In some regions, activities have focused on tourism (e.g., Northeast Partnership). The map on the following page shows the seven economic development regional partnerships, with UNC and NCCCS institutions superimposed on the map.

The study mandated in HB 1264 directed that the analyses of demographic, economic, and educational information be done on a state-wide basis and also on a regional basis. The seven economic development partnerships served as the basis to obtain regional data and information.

State of North Carolina Higher Education System and Economic Development Regions



Legend
 • NC Community College System
 ★ University of North Carolina System

Economic Development Regions

- Advantage West
- Charlotte Regional Partnership
- North Carolina's Eastern Region
- North Carolina's Northeast Partnership
- Piedmont Triad Regional Partnership
- Research Triangle Regional Partnership
- North Carolina's Southeast

Challenges

The analysis of regional information was performed by Regional Triangle Institute (RTI). The major challenge encountered during the analysis of information from the regional partnerships was the unevenness and quality of the information. In general, the three older partnership organizations in the urban regions had better information (Research Triangle Partnership, Charlotte Regional Partnership, Piedmont Triad Partnership). Advantage West that serves 23 western counties also had useful information. The other three partnerships, serving rural regions, were not as far along in developing strategic plans or in presenting information that was beneficial to the study.

The State Auditor has recently conducted performance audits of some of the regional partnerships. An audit report that was critical of the Northeast Partnership was released in March 2006 and included numerous recommendations concerning organizational and fiduciary problems. This report has been widely publicized in the media, with several prominent legislators indicating that the problems will be “fixed” in the 2006 legislative session. Though specific changes have not been mentioned, one possibility is that the North Carolina Department of Commerce will be required to provide more oversight of the partnerships. Currently, they operate relatively independent of such oversight.

Though an evaluation of the regional partnerships is beyond the purview of this study, there are some general recommendations that would add value to the work of these organizations as it relates to the University of North Carolina and the North Carolina Community College System.

Recommendations

1. UNC and NCCCS leadership should request that each partnership governing board include UNC and NCCCS representation (chancellor or president). With the changes the legislature may be making, such a request would be timely. This could be incorporated into legislation.

Each of the regional partnerships has a governing board. The appointment process varies across the seven organizations. Regardless of how board members are appointed, representation from the UNC and NCCCS institutions would add value to the work of the organizations, including “letting the right hand know what the left hand is doing.” Information on the partnerships’ websites is sketchy in most cases regarding board membership, though the older partnerships have higher education membership (e.g., Research Triangle and Charlotte partnerships).

2. If North Carolina policymakers keep the current economic partnership structure (i.e., seven regions), the Employment Security Commission should be directed to provide employment projections to the seven economic development partnerships.

A large challenge in RTI's analysis of regional employment data, especially employment projections, was that the North Carolina Employment Security Commission does not disaggregate data on a regional basis. For example, employment projections are made based on the state's 25 workforce delivery areas. Federal law requires this type of breakdown of the projections. The problem encountered by RTI is that the workforce delivery areas do not neatly overlay the seven partnership boundaries. Considerable time was spent manipulating data to provide regional projections.

Summary

Every state in the nation is seeking a strategic advantage as it competes for new businesses. Economies tend to be regional in nature. North Carolina has very strong public university and community college systems; the regional approach to economic development developed over the past decade is also cited as one of the best in the nation. Leadership at the highest level in all of these programs should push to build more collaborative endeavors, which has the potential to give North Carolina a distinct strategic advantage as it competes with other states.

E. Rural Economic Transformation

Background

North Carolina's population is almost evenly divided between urban and rural. While there have been modest shifts towards more urban and suburban living, the fact remains that, even with substantial challenges to agriculture, North Carolina is likely to continue to be a significantly rural state. The 2000 census showed that in the previous decade the urban areas of the state had grown 25%, while the rural areas had grown 18%; that 18% represented 600,000 people. Interestingly, this pattern of population choice is reflected in the in-migration choices of Hispanics, 45% of whom settled in rural counties in the 1990s.

Yet even the term "rural" is a generalization, with the variations among rural communities being substantial. Many of the fastest growing rural counties (Franklin, Johnston, Hoke, and Union) are next to urban areas and, therefore, have economies linked to those areas. Other fast growing rural counties (Brunswick, Dare, and Henderson) have been positively impacted by their attractiveness to retirees. Yet other rural counties have no link to an urban area and no significant in-migration. Indeed, many of these counties have either lost population or not grown at all in recent years. As this data from the North Carolina Rural Economic Development Center indicate, the demographics and geography of the state's rural counties vary considerably.

Challenges

Rural economic development is a conundrum. The variations cited above mean that there are no one-size-fits-all solutions. And the strategies that did work in the past for rural counties, including the exchange of land for jobs (often small manufacturing or small textile plants), no longer work consistently. States have sought to help with initiatives such as placing prisons increasingly in rural areas to increase employment opportunities or investing part of their tobacco settlements as venture capital for rural communities. Yet these efforts have limitations as long-term strategies.

In general, at a time when education and skilled workforces are a premium for economic development, rural counties often have relatively low educational attainment. In addition, frequently the best educated young people in a community are attracted to the economies and the cultural amenities of urban areas, thereby further compounding the demographic, educational, and poverty challenges of rural communities. The social and family impacts of such out-migration also have human consequences.

North Carolina has been responsive to the rural challenges and has assets and initiatives that have been valuable. The North Carolina Rural Economic Development Center provides data and analysis. The geographic distribution of higher education has proven to be an asset and is likely to be of increasing importance in the future. The efforts of e-NC, created as a result of Governor Hunt's 1999 North Carolina Rural Prosperity Task Force, has insured that "the digital divide" between rural and urban areas has been minimized by helping rural communities become e-communities. Yet the state will need to be increasingly intentional about rural economic development if it is indeed going to transform the economy of the entire state.

Recommendations

1. The state of North Carolina, UNC, and NCCCS should establish three pilot regional, rural enterprise zones with substantial funding. Each zone would focus on a different strategy; the three strategies would be:
 - (i) Rural business clusters
 - (ii) Non-agricultural entrepreneurship
 - (iii) Redirection of agriculture

These pilots should receive five year funding with substantial accountability requirements, including rigorous assessment of the return on the state's investment and on assembling best practices for other rural regions.

The three recommended strategies have all been tested and have successful track records around the country. These are detailed in "Innovative State Policy Options to Promote Rural Economic Development," produced by the National Governors' Association (NGA) Center for Best Practices (February 2003).

Rural Business Clusters utilize the same philosophy as the better-known urban clusters (which are often fueled by university research, as North Carolina has well demonstrated). NGA defines a cluster as: “a concentration of similar, related or complementary businesses, with active channels for business transactions and communication.”

The application of clusters in rural areas has had promising results in states like Minnesota (for example, in northwest Minnesota there is a recreational transportation equipment manufacturing cluster), Ohio (for example, specialty foods), and Connecticut (for example, bioscience). North Carolina also has experience in rural clusters with the Hosiery Technology Center (HTC) and Arts and Crafts in western North Carolina.

There are lessons to be learned from this first generation of clusters. Key to this study is the fact that higher education is the central component, along with substantial initial state seed money. For higher education, it has required some realignment of approach. Community colleges, for example, tend to have more experience in workforce training than in developing entrepreneurs. For states, it has been the realization that investment at the front end is essential. The HTC, for example, receives about \$600,000 per year from the state. Housed at Catawba Valley Community College (collaborating with Randolph Community College), the HTC has been a crucial element for an industry under duress.

Non-agricultural entrepreneurship has great potential for rural economic development as long as any program has these key elements:

- Highly focused (see, for example, Kansas Rural Enterprise Facilitation program).
- Undergirded with higher education training (see, for example, Nebraska EDGE, Enhancing, Developing, and Growing Entrepreneurs).
- Access to initial capital (see, for example, the Kentucky Rural Innovation Fund and the Wisconsin CapVest).

Redirection of agriculture helps farmers diversify, as is already happening in North Carolina because of reductions in tobacco production. Once again, education (and technical expertise) and capital are key components. North Dakota, through its Agricultural Products Utilization Commission, provides interesting examples, with diversification of livestock (adding bison, elk, and emus), crops (adding chick peas), utilization of crops (adding candle oil as a derivative from soybeans), and land use (cabins for out-of-state waterfowl hunters; out-of-state permits increased from 4,233 in 1998 to 30,028 in 2001). Other states cited by NGA include Kentucky (Agricultural Development Fund), South Dakota (Value-Added Agriculture Subfund), and Iowa (Value-Added Agriculture and Product Branding).

All three strategies need to optimize the use of technology to reduce the rural challenges of distance and communications, particularly through their use of robust networking.

2. The three pilot regional, rural enterprise zones should be selected through a Request for Proposal Process (RFP) with the requesters being consortia of UNC and NCCCS institutions. The regions should be self-defined and not constrained by existing structures.

Placing higher education at the center of this process and requiring consortia of UNC and NCCCS institutions will insure that these zones receive the full engagement of higher education (including a wide range of the assets of higher education such as marketing research, which is crucial for all three strategies). The governance and oversight of the zones should include a broad cross-section of the region.

Summary

As the NGA report concludes:

“However they are formed and implemented, rural economic development policies must build upon the inherent strengths of rural America – abundant natural resources, close-knit communities, strong local business networks, and a largely untapped tradition of entrepreneurial creativity.”

The recommendations recognize that differences among rural regions require multiple approaches. Rigorous pilot programs allow the state to have a measured investment before scaling up based on best practices. Without intentionality of purpose, North Carolina is likely to experience further divides between urban and rural areas and between prosperity and poverty. Rural enterprise zones create that intentionality.

VII. LEGISLATIVE ACTIONS

1. The funding formulas for both UNC and NCCCS should be reviewed and revised so as to fund fully all instruction regardless of when or how it is offered. Specifically, summer instruction and e-learning should be fully funded so as to maximize opportunities for students and the return on the state's investments in facilities and technology. Such funding would be consistent with that of competitor states.
2. NCCCS should be immediately removed from the administrative rule-making requirements of the state (the Administrative Procedures Act) so as to increase its nimbleness to respond to state needs. It should be noted that UNC is exempt from the APA requirements.

3. North Carolina should pass legislation to permit out-of-state students in counties that border North Carolina to pay in-state tuition, as many competitor states do. This could be done on a pilot basis to allow a study to be conducted to see what percentage of those students then enter the North Carolina workforce.

CONCLUSION

When HB1264 was passed, it perhaps anticipated that there would be considerable gaps between the graduates produced and the needs of North Carolina's economy. Except in the areas cited in this report (nursing, teaching, and computer science), this largely did not turn out to be the case, which is a compliment to the anticipation, planning and responsiveness of UNC and NCCCS and their respective institutions. In emerging industries, which are likely to be a crucial factor in a state that needs to transform not just develop its economy, there is not yet data to make that determination about gaps. However, it appears that both UNC and NCCCS are significantly involved with those emerging industries. With more formalized structures to work with these industries, and with adjustments and realignments of the curriculum (such as greater interdisciplinarity and the teaching of 21st Century skills), higher education seems likely to be responsive. However, as the recommendations illustrate, it will need to be made more nimble (in program approval, for example), more collaborative (both within and across systems, including K-12), and more risk tolerant (with incubator degrees and on-line consortial degrees, for instances).

The recommendations include general priorities for future facilities, although they do not at this point include specific building recommendations. The legislature and the leadership of UNC and NCCCS will need to determine the appropriate time to consider any new major bond initiative. In the meantime, though, they must increase the annual activity in capital construction with priority given to reducing deferred maintenance, improving the technology infrastructure (a potential capital cost reduction/avoidance investment), and recognizing the importance of facilities for academic programs that serve the direct economic transformation needs of the state. At the same time, the state cannot afford (both literally and figuratively) to fall behind on the infrastructure needed to support the documented enrollment projections (see Appendix 6) called for in HB1264.

North Carolina has many assets, including world class research universities (both public and private) and a well distributed community college system. In addition, UNC and the legislature have visionary commitments to the HMIs and have been bold and innovative in emphasizing science and technology degrees within the HMIs (nationally Blacks consist of about 11% of the population but only contribute 6.9% of the science and engineering workforce). At the same time, UNC has honored the history of the HMIs by, for example, strengthening their teacher education programs. In an increasingly diverse state, the attention to the achievement of minority students at all institutions has to be a priority. An educated diverse workforce is a competitive asset.

North Carolina has liabilities as well. Although outside the purview of this study, the pipeline from K-12 seems suspect in size (dropouts), preparation (need for remediation), and interests (math and science). That is why there are strong recommendations to build on the recent initiative creating a joint UNC/NCCCS cabinet by forming a genuine P-16 structure and environment in the state. Best practices elsewhere (particularly in southern states) demonstrate the return on investment in P-16.

The report contains many recommendations for a simple reason: There is no “magic bullet” in economic transformation. True transformation comes about when people across and within all sectors (government, education, business/industry, not-for-profit, arts and culture) come together in genuine partnerships for the common good. It comes about when processes are improved. It comes about when bureaucratic impediments are swept aside. It comes about when, intertwined with basic improvements, a few bold experiments are launched. And it comes about when the state and the private sector come together to invest the resources needed to stimulate transformation.

While this study does not include specific dollar recommendations in the facilities area, it does do so in general programmatic areas. Whenever feasible, the recommendations urge start-up funding for both new or expanded academic programs and for rural economic transformation pilot programs. Start-up funds typically stimulate early innovation and creativity that long-term rebounds to the benefit of the state.

Many of the recommendations can be implemented immediately and most do not require new dollars. A few of the recommendations are intended to stimulate debate and further brainstorming that will hopefully lead to creative modifications and additions. Taken together, the recommendations should significantly enhance higher education’s capacity to be both a catalyst and creator for North Carolina’s economic transformation, a transformation that will not only improve the state’s global competitiveness, but will also improve the quality of life for all North Carolinians.

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2005

SESSION LAW 2005-198
HOUSE BILL 563

AN ACT PERMITTING THE COMMUNITY COLLEGE SYSTEM TO PROVIDE
COURSEWORK TO PERSONS ENTERING THE TEACHING PROFESSION BY
LATERAL ENTRY, AND TO REDUCE FROM FIVE YEARS TO THREE
YEARS THE LENGTH OF A PROVISIONAL TEACHING CERTIFICATE
ISSUED TO A LATERAL ENTRY TEACHER.

The General Assembly of North Carolina enacts:

SECTION 1. G.S. 115C-296(c) reads as rewritten:

"(c) It is the policy of the State of North Carolina to encourage lateral entry into the profession of teaching by skilled individuals from the private sector. To this end, before the 1985-86 school year begins, the State Board of Education shall develop criteria and procedures to accomplish the employment of such individuals as classroom teachers. ~~Regardless of credentials or competence, no one shall begin teaching above the middle level of differentiation.~~ Skilled individuals who choose to enter the profession of teaching laterally may be granted a provisional teaching certificate for no more than ~~five~~ three years and shall be required to obtain certification before contracting for a ~~sixth~~ fourth year of service with any local administrative unit in this State.

It is further the policy of the State of North Carolina to ensure that local boards of education can provide the strongest possible leadership for schools based upon the identified and changing needs of individual schools. To this end, before the 1994-95 school year begins, the State Board of Education shall carefully consider a lateral entry program for school administrators to ensure that local boards of education will have sufficient flexibility to attract able candidates."

SECTION 2. G.S. 115C-296(c), as amended by Section 1 of this act, reads as rewritten:

"(c) It is the policy of the State of North Carolina to encourage lateral entry into the profession of teaching by skilled individuals from the private sector. To this end, before the 1985-86 school year begins, the State Board of Education shall develop criteria and procedures to accomplish the employment of such individuals as classroom teachers. Skilled individuals who choose to enter the profession of teaching laterally may be granted a provisional teaching certificate for no more than three years and shall be required to obtain certification before contracting for a fourth year of service with any local administrative unit in this State.

(c1) The State Board of Community Colleges may provide a program of study for lateral entry teachers to complete the coursework necessary to earn a teaching certificate. To this end, the State Board of Education, in consultation with the State Board of Community Colleges, shall establish a competency-based program of study for lateral entry teachers to be implemented within the Community College System no later than May 1, 2006. This program must meet standards set by the State Board of Education.

The State Board of Community Colleges and the State Board of Education shall jointly identify the community college courses and the teacher education program courses that are necessary and appropriate for inclusion in the community college program of study for lateral entry teachers. To the extent possible, any courses that must

be completed through an approved teacher education program shall be taught on a community college campus or shall be available through distance learning.

In order to participate in the community college program of study for lateral entry teachers, an individual must:

- (1) Hold at least a bachelors degree from a regionally accredited institution of higher education;
- (2) Have completed the bachelors degree at least five years before undertaking the program of study under this subsection; and
- (3) Hold a lateral entry teaching certificate and be employed as a teacher in a local school administrative unit.

An individual who successfully completes this program of study and meets all other requirements of certification set by the State Board of Education shall be recommended for a North Carolina teaching certificate.

(c2) It is further the policy of the State of North Carolina to ensure that local boards of education can provide the strongest possible leadership for schools based upon the identified and changing needs of individual schools. To this end, before the 1994-95 school year begins, the State Board of Education shall carefully consider a lateral entry program for school administrators to ensure that local boards of education will have sufficient flexibility to attract able candidates."

SECTION 3. G.S. 115D-5 is amended by adding a new subsection to read:

"(p) The North Carolina Community College System may offer courses, in accordance with the lateral entry program of study established under G.S. 115C-296(c1), to individuals who choose to enter the teaching profession by lateral entry."

SECTION 4. The State Board of Education and the State Board of Community Colleges shall submit annually to the Joint Legislative Education Oversight Committee a report on the community college program of study for lateral entry teachers established under this act. The initial report is due no later than April 1, 2006. The final report, due no later than April 1, 2011, must include recommendations as to whether this program should continue and, if so, must include the reasons for its continuation and any recommended legislative changes needed to enhance the program.

SECTION 5. This act is effective when it becomes law. Section 1 of this act applies to provisional teaching certificates issued on or after that date. Sections 2, 3, and 4 of this act expire July 1, 2011.

In the General Assembly read three times and ratified this the 11th day of July, 2005.

s/ Marc Basnight
President Pro Tempore of the Senate

s/ James B. Black
Speaker of the House of Representatives

s/ Michael F. Easley
Governor

Approved 11:16 a.m. this 19th day of July, 2005

Lateral Entry Update

Prepared for October 11, 2006 Meeting of the Joint Legislative Education Oversight Committee of the North Carolina General Assembly

Lateral Entry (Certificate) (C55430)

The Lateral Entry curriculum, developed for teachers who hold lateral entry license, provides a course of study leading to the development of the general pedagogy competencies needed to become certified to teach by the North Carolina Department of Public Instruction.

Course work includes human growth and development, learning theory, instructional technology, school policies and procedures, home, school, and community collaborations, and classroom organization and management to enhance learning. Courses offered by partnering senior institutions include instructional methods, literacy, and diversity.

Graduates should meet the general pedagogy competencies within the first three years of teaching, including a minimum of six semester hours per school year. Additional requirements, such as pre-service training and passing the PRAXIS, are required for licensure.

The following colleges are approved to offer the program:

Bladen Community College	EDU 243 – 4; EDU 272 – 4
Central Piedmont Community College	None, local schools are doing the training
Cleveland Community College	
Coastal Carolina Community College	
Edgecombe Community College	EDU 243 – 1; EDU 271 - 3
Davidson County Community College	
Gaston College	Two courses will begin in October
Guilford Technical Community College	EDU 244 – 5 students
Halifax Community College	Not offering yet
Lenoir Community College	EDU 244 – 5 students
Montgomery Community College	Not offering until Spring
Richmond Community College	
Roanoke-Chowan Community College	Not offering classes yet
Robeson Community College	Classes start 9/14
Rockingham Community College	Not offering until Spring
Sandhills Community College	PSY 241 – 12 students (2 Lateral Entry)
Southwestern Community College	
Stanly Community College	No enrollment
Vance-Granville Community College	EDU 243 – 5 students

Applications have been received from Alamance Community College, Carteret Community College, and Southeastern Community College and are pending approval.

Piedmont Community College has not sought approval to offer the certificate program but is offering the courses and has had 4 students enroll in each course.

Other colleges are waiting to apply to see how the first group is doing or have not proceeded because the local education agency has decided to sign off on so many of the competencies.

Recommendation from July Meeting of College Representatives from across the state:

Remove restrictions of having to be currently employed and have held the bachelor's degree for more than five years.

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

H. Martin Lancaster, President

North Carolina Community College System



PUBLIC SCHOOLS OF NORTH CAROLINA

STATE BOARD OF EDUCATION Howard N. Lee, *Chairman*

DEPARTMENT OF PUBLIC INSTRUCTION June St. Clair Atkinson, Ed.D., *State Superintendent*

WWW.NCPUBLICSCHOOLS.ORG

March 31, 2006

The Honorable A. B. Swindell
North Carolina Senate
629 Legislative Office Building
Raleigh, NC 27603-5925

The Honorable Douglas Yongue
North Carolina House of Representatives
1303 Legislative Building
Raleigh, NC 27601-1096

Dear Senator Swindell and Representative Yongue:

Session Law 2005-198 permits the Community College System to provide course work for lateral entry teachers, and requires that an annual report on the status of the program be submitted to the Joint Legislative Education Oversight Committee. Last fall, the Executive Director of the State Board of Education convened several meetings with representatives of the Department of Public Instruction, the North Carolina Community College System, the University of North Carolina General Administration, and the North Carolina Independent Colleges and Universities to discuss specifics of the program. It is our understanding that the Community College System is planning to develop an 18 semester hour sequence of course work for lateral entry teachers and has adopted guidelines for the program.

We believe that State Board of Education policies are aligned with the legislation and that they do not need to be further revised to allow implementation of the community college program. Department staff has offered to convene representative stakeholders from the public schools to meet with representatives of the North Carolina Community College System as the System develops the new course work it is planning to offer.

Please let me know if I may provide any additional information on the status of the program.

With kindest regards, and best wishes, I am

Respectfully,

A handwritten signature in dark ink, appearing to read "Howard N. Lee".

Howard N. Lee

HNL:KMS

OFFICE OF THE STATE BOARD OF EDUCATION

Howard N. Lee, *Chairman* | hlee@dpi.state.nc.us

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AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER



*Lieutenant Governor Beverly Perdue, Senator Vernon Malone
and Representative Joe Tolson
cordially invite you to attend a joint meeting of the
Business Education Technology Alliance,
the School Technology Commission, and
the Joint Technology Oversight Commission to take a live virtual tour
of
"Future Ready Schools- Learning in a Global Economy"
on Wednesday, October 18, 2006,
9:00 AM – 12:00 PM
at Nortel
4001 E. Chapel Hill-Nelson Hwy
Research Triangle Park, NC 27709*

RSVP by October 11

(919) 832-7215



"Future Ready Students: Learning in a Global Economy"
Joint Meeting of the legislated Technology Commissions
Wednesday, October 18, 2006
Nortel, RTP
9:00-12:00

Desired Outcomes: By the end of this meeting, participants will have a/an:

- Understanding of the Vision for 21st Century learning and the role of the School Technology so that schools will be built, equipped and operated with the necessary programs, personnel, and infrastructures that support that vision.
- Understanding of the Mission, Goals, and Strategies for the State Board of Education's Strategic Plan –Future Ready Students for the 21st Century so that participants will be able promote the learning priorities for North Carolina.
- Understanding of the Role of the Center for 21st Century Skills in supporting the State Board of Education's Strategic Plan - Future Ready Students for the 21st Century so that participants will support the necessary changes to curriculum, instruction and assessments.
- Experience virtual interaction with students and teachers in an elementary, middle and high school that are transitioning to project based and other rigorous learning utilizing technology tools.
- Awareness of the types of technology tools, networks, personnel and connectivity schools need to support learning so that they can support state funding for technology in schools.
- Understanding of the need for developing a comprehensive plan with strong accountability for infusing technology in schools so that the General Assembly will provide the necessary funding for the plan.



"Future Ready Students: Learning in a Global Economy"
Joint Meeting of the legislated Technology Commissions
Wednesday, October 18, 2006
Nortel, RTP
9:00-12:00
Agenda

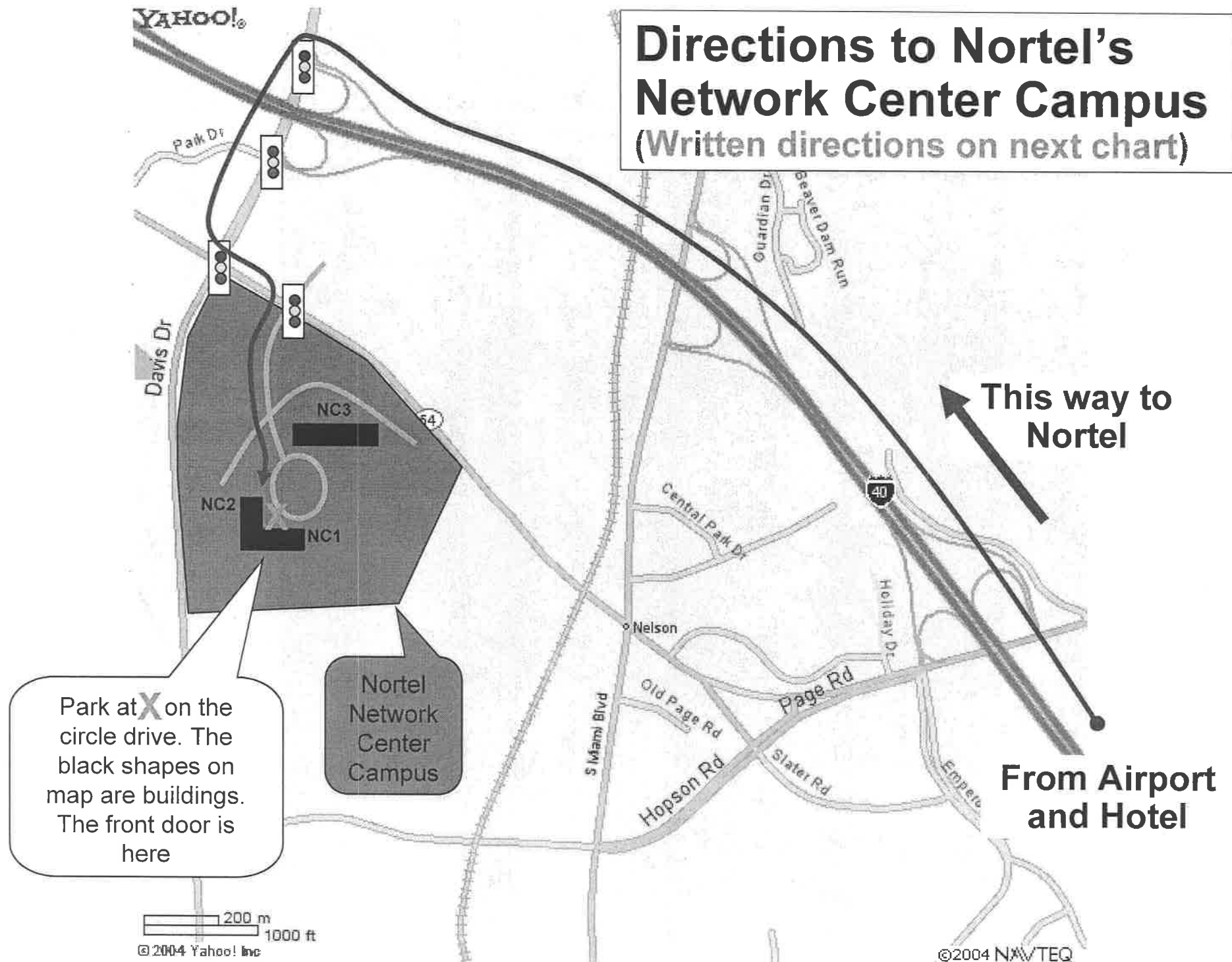
9:00-9:30	<i>Celebratory Breakfast</i>	
9:30-9:40	<i>Welcome and Business Perspective for Technology in education and a global economy</i>	Joel Hackney, Senior Vice President Global Operations and Quality Nortel
9:40-9:55	<i>Convening of the meeting and recognition of leadership and guests</i>	The Honorable Bev Perdue Lieutenant Governor The Honorable Joe Tolson House of Representatives The Honorable Vernon Malone NC State Senate
9:55- 10:05	<i>Vision for 21st Century Learning</i>	John Boling, Chairman BETA Vision Committee Interim Director, NCVPS
10:05-11:05	<i>21st Century Learning in NC Schools and A Live Virtual Experience with:</i> <ul style="list-style-type: none">• <i>students and teachers in Robeson County</i>• <i>Mike Brennan Services EMEA Nortel, United Kingdom</i>	Edgar Murphy, Nortel Member, NC State Board of Education Frances Bradburn, Director <i>Multimedia</i> Technology Services, NCDPI
11:05-11:20	<i>State Board of Education's Strategic Plan Future Ready Students for the 21st Century</i>	The Honorable Howard Lee, Chairman NC State Board of Education Rebecca Garland, Executive Director NC State Board of Education
11:20-11:30	<i>Role of the Center for 21st Century Skills</i>	Melissa Bartlett, Director Center for 21 st Century Skills and Member of the NC State Board of Education

11:30-11:35	<i>Role of the School Technology Plan Connectivity Project</i>	Peter Asmar, Associate Superintendent Technology Services, NCDPI
11:35-11:45	<i>Technology tools, networks, personnel and connectivity schools need to support learning</i>	Phil Emer Friday Institute
11:45-11:55	<i>A Comprehensive Plan with strong accountability for infusing technology in NC Public Schools and Next Steps</i>	The Honorable Bev Perdue Lieutenant Governor The Honorable Joe Tolson House of Representatives The Honorable Vernon Malone NC State Senate
11:55-12:00	<i>Meeting Evaluation</i>	
12:00	<i>Lunch</i>	

Technology Commissions meet separately following lunch.

Directions to Nortel's Network Center Campus

(Written directions on next chart)



Nortel NC2 Campus
4008 East Chapel Hill-Nelson Hwy
Research Triangle Park, NC

HWY 70 EAST

TO GENERAL AVIATION

Lumley Rd.

Commerce Dr. Angus Barn

Terminal B

Terminal C

Terminal A

Aviation Park Way
To RDI

TO CAR RENTAL

Exit 280

40 West

540

GATEWAY

54 West

40 East

Davis Drive

Exit 284A

Shopping Mall

Exit 284B To RDI

NC3

Parking

NCRTF

NC2

NC1

Directions from the Airport/I-40 to Nortel NC2 Building:

Follow Interstate 40 West to Exit 280-Davis Drive. Take a left at the light onto Davis Drive. At the intersection of Hwy 54 and Davis Drive turn left. At the next light turn right. When you get to the stop sign continue thru into circle.

If you need assistance, please call the NC2 front desk at (919) 991-7700

Minutes
JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE
2005-2006 Session
January 10, 2006

The Joint Legislative Education Oversight Committee met on Tuesday, January 10, 2006 at 10 o'clock a.m. in Room 643 of the Legislative Office Building. Senator A. B. Swindell presided and members in attendance were Co-chairmen Yongue; Senators Apodaca; Garwood; Lucas; Cowell; Nesbitt; Atwater; Stevens; Hartsell; Hagan; Dorsett; Dannelly; and Representatives Preston; Warren; Lucas; Grady; McLawhorn; Tolson; and Pate. Members of the legislative research and fiscal staffs and committee clerks were also in attendance. A visitor registration sheet is attached (Attachment 1).

Chairman Swindell called the meeting to order at 10:00 a.m. and welcomed members and guests to the meeting. The chair recognized Erskine Bowles, newly appointed president of the North Carolina University System and expressed pride for North Carolina as he assumes this important leadership role.

President Bowles informed the committee that he was enthusiastically looking forward to the challenge of leading the University System and he noted that, although a tremendous amount of progress had been made on college campuses during the last eight years, there were enormous challenges ahead. President Bowles discussed the need to get more citizens better educated, in order that we may compete in the global economy and he gave examples of how students in America compared with students globally. The president noted that resources were shrinking, state and federal budgets were tighter, but he was committed to more efficiently and effectively managing North Carolina's higher education system. He further stated that it was the responsibility of higher education to also focus on improving education in grades K through 12 by assuring quality teachers coupled with a stronger curriculum. President Bowles also advised that the University System would be collaborating closely and more effectively with the NC Community College System. He further discussed access, affordability and distance-learning issues and the need to make college a reality for all students advancing from high school. In closing, the President expressed his commitment to managing the University System and urged legislator to share their ideas and advice for a stronger system. The Chairman thanked President Bowles at the conclusion of his remarks.

The chair next recognized Dr. Delores A. Parker, Vice President Academic and Student Services of the NC Community College System. Using a power point presentation to report about the significance of distance learning (Attachment 2), Dr. Parker gave some historical background about legislation enacted in 1995, H739 (SL 1995-287) and S1161 (SL 1996-625), which directed that both the NC Community College System and the University System improve the transferability of credits between the institutions. This legislation resulted in creating of the Comprehensive Articulation Agreement, and directed that the governing boards of both entities jointly hold annual meetings. Dr. Parker informed members that annual meetings were still being held. Dr. Parker also

reported that the Virtual Learning Community program was created by the NC Community College System in 1999, and that in 2004, a joint task force was appointed and offered four recommendations. Dr. Parker noted that one recommendation identified was the need to develop online courses that would specifically address the shortage in the areas of teaching and nursing. Dr. Parker also reviewed the 2+2 E-Learning Initiative program. In closing, Dr. Parker summarized the growth in the area of distance learning and the extended degree programs currently available. Questions were raised and answered.

The chairman next called on Alan Mabe, Vice President of Academic Planning, UNC-General Administration. Mr. Mabe used a power point presentation to illustrate the Distance and Online Learning initiatives at the University (Attachment 3) and stated that UNC and NCCCS would offer statewide availability of seven degree programs in the fall of 2006. The degree programs were: Communications; Business Administration; Criminal Justice; Liberal Arts; Birth to Kindergarten; Elementary Education and Special Education. He advised that it was a complex and complicated process, with eight joint subcommittees addressing issues of pre-major agreements, joint course development, infrastructure to support 2+2 online degrees, advising, student tracking, professional development and modules on College Foundation of North Carolina. He reported that future plans were to develop degree programs in mathematics and science education and this was their highest priority. He also reported there was a nursing teacher shortage and he stated there were two masters programs available online for science and nursing and the nursing program had 22 nurses enrolled who had committed to teach nursing. Mr. Mabe responded to several questions and the chair thanked him for the report.

The chair requested Tim McDowell, Vice President for Government Relations with the NC Independent Colleges and Universities, comment on whether the private institutions were providing online learning. Mr. McDowell stated that most of the private colleges offered some kind of relationship with community colleges, and he advised that 22 private colleges had signed the comprehensive articulation agreement; others had onsite programs, with the largest, most successful 2+2 program at a private college in the western part of the state. He concluded by saying that many participated and had very successful distance learning programs.

The chair next recognized Sandra Williams, Vice President for Administration, NCCCS, and Robyn Render, Vice President and CIO, UNC General Administration, to report on the E-learning infrastructure needed to support the collaborative effort between the University and the Community College System. With a power point presentation (Attachment 4), Ms. Williams informed about electronic learning as an education delivery method and pointed out that the current delivery methods. Ms. Williams stated that 21st Century learning required reliable, flexible and accessible instructional delivery methods and that E-learning was emerging as the primary delivery method of choice for most students and she demonstrated by linking to an on-line course. She further demonstrated student services by showing the home page of Fayetteville Technical Community College and advised that a significant number of military personnel from around the world utilized this website. Ms. Reeder explained how the two entities were

currently sharing infrastructure and she addressed future infrastructure expansion needs and the costs associated to support the collaborative E-learning efforts in higher education. Following questions, the chair thanked both for their presentation.

The Chair recessed the meeting at 12 noon for lunch.

The Chair reconvened the meeting at 1:15 p.m. He recognized Alexis Schauss, Chief, Information Analysis and Reporting Section at the NC Department of Public Instruction to report on the School Employees' Salary Structure. Ms. Schauss directed members to a handout in their agenda packets (Attachment 5).

Ms. Schauss gave an overview of how salaries are determined for public school employees. She provided detailed salary schedules and provided information as to how these are created. Ms. Schauss advised that public school employees were categorized into three groups – Central Office Administrators; Non-certified Employees and School-based Educators. She informed that Central Office Administrators' (superintendent, Assoc/Assist. Superintendents and Finance Directors) minimum and maximum salary ranges were determined by legislation in the appropriations bill, and the local board of education determines within that range how much each employee is paid. In addition to the state portion, most LEAs provide employees with a local salary supplement, which ranges, but averages to 28% of their salary. Ms. Schauss also advised that the Non-certified or "classified" employees were assigned a salary very consistent with state employees and the State Board assigned Non-certified employees to a pay grade based on the level of the position, and each pay grade had a salary range associated with it. The third category of educators also paid from the legislative Teacher Salary Schedule were the School-based Educators, who were made up of classroom teachers, media coordinators, guidance counselors, social workers and certified nurses. She noted that psychologists, audiologists/speech language pathologists, assistant principals and principals were paid from a *derivative* of the Teacher Salary Schedule and that when teachers' salaries were increased, it also affected the group of employees paid under the derivative of the teacher salary schedule.

Ms. Schauss further explained the Certified Teacher Salary Schedule on Page 6 of Attachment 5 and noted the base salary figures did not include any salary supplement. She next reviewed a chart on Page 9, which compared salary figures based on a teacher's first year of teaching, their 15th year, as well as their 29th year of teaching. Ms. Schauss next reviewed how the specific instructional support positions and school-based educators were compensated from a derivative of the Teacher Salary Schedule and she reviewed a history of the teacher salary schedule starting from 1990, when the 29-step schedule was initiated.

Ms. Schauss reported on the Excellent Schools Act passed in 1997, which awarded classroom teachers, media coordinators and guidance counselors, who remained in the classroom to teach rather than move into administrative roles, with a 12% differential pay, three days paid leave and an assessment fee. She further reported that between 1997 and 2000 the average annual salary increase was 7.5%, with increases ranging from 3%

to 14% annually. In 1999, the ABC bonus was instituted and in 2000, the Masters differential salary was increased from 6% to 10%. Ms. Schauss illustrated with graphs the effects the changes in the salary schedule have had from 1996 through 2005 and she reviewed some classroom teacher statistics and their annual benefits.

Rep. McLawhorn asked about the concept of a compressed salary schedule and whether any research had been done on this topic and Ms. Schauss responded that she had not been requested to develop figures on a compressed salary schedule and did not have information to share. Rep. McLawhorn suggested to the chair that the committee possibly take a look at this subject in the future. Rep. Lucas inquired as to whether teachers were informed about conserving sick days and applying them towards an early retirement. Kathryn McKinney, vice president, NCAE, was asked to comment on this subject, and she advised that both new and experienced teachers were well informed about their benefits package and, specifically, about how to apply unused sick leave towards an early retirement. She further stated that NCAE informed teachers leaving the profession about the benefits of maintaining their account with the retirement system. Sen. Hagan asked Ms. Schauss several questions regarding National Board certification and the renewal process. Hartsell requested if data was available which showed the number of substitute teacher days taken statewide on annually basis for five years. The Chair directed staff to provide this information following the meeting. The Chair thanked Ms. Schauss for an informative presentation.

The Chair next called on Jo Ann Norris, Associate Executive Director, NC Public School Forum for an update on specific components of the Teaching Fellows Program. Ms. Norris provided a folder (Attachment 6) which contained several handouts.

Ms. Norris reported that all policies, procedures and decisions about the Teaching Fellows Program were made by the Teaching Fellows Commission, which was statutorily authorized with the passage of legislation (115C-363.22-23A) to be a body of 11 members: 3 appointed by the Speaker; 3 appointed by the President Pro Tem; 3 appointed by the Governor, and the State Board of Education Chair's designate, and the Chair, who is designated by the Lt. Governor. She informed that members served four-year terms and the designees served at the pleasure of the SBE chair and the Lt. Governor. Ms. Norris commented that the program had been fortunate to have had long-term service by some of the members and the continuity had contributed to the stability of the program.

Ms. Norris stated that in 1987, under the first-named chairman, Thomas Lambeth of Winston-Salem, the Commission chose nine campuses in the university system to participate. The criteria for the selection process included: the existence of an approved Teacher Education undergraduate program; the number of candidates enrolled in the Teacher Education Program; the number of teacher education graduates; an established master's degree program, and the reputation of the school's program.

Ms. Norris gave a brief overview of the expansion of the program since 1987 and reported that in 2003, the Commission Chair appointed a subcommittee to study issues related to expansion to include freshman cohort numbers, impact of additional campuses

in relation to the total number of scholarships, and staff support for the program. In November, 2003 the Commission approved the subcommittee's recommendation not to consider expansion at that time due to factors related to the above stated issues. She reported that this position had been revisited annually and reaffirmed due to budgetary and administrative issues. She reviewed current campus cohort numbers; campus selection by recipient process and the selection process for regional finalists and recipients. Ms. Norris commended the legislature for their support of the Teaching Fellows Program and responded to questions. Sen. Dorsett expressed concern over the lack of minorities participating in the program and suggested a concerted effort to recruit minorities into teaching profession was needed. Sen Dannelly inquired as to whether Project Teach was still funded in the Department of Public Instruction's budget. Ms. Norris responded to several questions clarifying requirements of the Teaching Fellows Program. The chair thanked Ms. Norris at the completion of her presentation.

Before adjourning, the Co-chair Swindell reviewed future meeting dates and agenda topics. Co-chair Yongue also urged members to attend the function scheduled for later in the evening at the Capital City Club to hear a presentation from the nationally board certified teachers. The meeting was adjourned at 3:15 p.m.

Respectfully submitted,

A. B. Swindell

ATTEST:

Mo Hudson, Committee Clerk

Draft Minutes
JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE

2005-2006 Session

January 10, 2006

7:15 p.m. Capital City Club

The Joint Legislative Education Oversight Committee met on Tuesday, January 10, 2006 at 7:15 p.m. at the Capital City Club, Raleigh, N.C. Chairman Yongue presided and members in attendance were Senators Swindell, Apodaca; Garwood; Lucas; Cowell; Nesbitt; Atwater; Stevens; Hartsell; Hagan; Dorsett; Dannelly; and Representatives Preston; Warren; Lucas; Grady; McLawhorn; Tolson; and Pate. Members of the legislative research staff were also in attendance.

Chairman Yongue called the meeting to order at 7:15 p.m. He also recognized representatives in attendance from the Hunt Institute; the NC Teacher Academy; NC Association of Educators; National Education Association; National Board of Professional Teaching Standards; Center for Teaching Quality; NC Lt. Governor's Office and NC State Board of Education Chairman Howard Lee. He noted these organizations made up the coalition that support the National Board of Certified Teachers.

Chairman Yongue recognized Eddie Davis, president of NCAE, to make brief opening remarks. Mr. Davis reported about a working summit held in August, 2005 and that every state nationally board certified teacher was invited to attend and share ideas that would insure students in North Carolina attained a higher achievement level. The summit also focused on ways to improve working conditions and insure excellent teachers in hard to staff schools. Mr. Davis introduced several teachers in the audience who had achieved certification by the Board and he asked that each be recognized for their achievement. Mr. Davis next introduced Jim Brooks of Wilkes County and Michelle Kapin of Caldwell County, both nationally board certified teachers. Both spoke on the importance of teachers in North Carolina achieving national board certification and several recommendations were offered from the summit for possible state board action and legislative consideration. The recommendations were taken under advisement and no formal action was taken by the committee.

Chairman Yongue thanked members of the committee and guests for their attendance and adjourned the meeting at 8:20 p.m.

Respectfully submitted,

Douglas Yongue

ATTEST:

Mo Hudson, Committee Clerk

DRAFT MINUTES
JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE
2005-2006 Session
January 11, 2006

The Joint Legislative Education Oversight Committee met on Wednesday, January 11, 2006 in Room 643 of the Legislative Office Building. Senator A. B. Swindell presided and members in attendance were Co-Chairmen Yongue; Senators Apodaca; Atwater; Cowell; Dannelly; Dorsett; Hartsell; Lucas; Nesbitt and Stevens; Representatives Bell; Glazier; Grady; Insko; Lucas; Pate; Preston, Tolson and Warren. Members of the education research and fiscal staffs and committee clerks were also in attendance. A visitor registration sheet is attached (Attachment 1).

The Chair called the meeting to order at 9:05 and welcomed members and guests to the meeting. In his opening remarks, he asked everyone to keep Representative Ronnie Sutton in their thoughts and prayers. Representative Sutton's nephew lost his life while serving his country in the military earlier in the week in Iraq.

College Access and Financial Aid

The Chair called on Dr. Bobby Kanoy, Assistant Vice President of Academic Affairs at UNC General Administration, to speak on college access and financial aid. Dr. Kanoy provided a newspaper article dated December 5, 2005 entitled, "Web site Boost College Planning," and noted the parallel article about the "529" college savings program (Attachment 2). Both articles were presented as information. He pointed out that the article had been printed just after the millionth account holder had registered in the system through the College Foundation of North Carolina (CFNC). Dr. Kanoy was also joined in his presentation by Brian Williams, director of technology and internet services for College Foundation of North Carolina; Susan McCracken, director of statewide GEAR UP North Carolina; and Dr. Steve Brooks from the State Education Assistance Authority.

Dr. Kanoy reviewed some of the challenges facing North Carolina and shared data obtained from the NC Statistical Profile-2003, which compared the number of students entering 9th grade to the actual number that graduate in four years and go on to obtain a higher degree. He also reviewed data obtained from the Western Interstate Commission for Higher Education that indicated a change in the composition of North Carolina's high school population and significant growth in the Hispanic population. Dr. Kanoy advised data indicated that in 2014, the Hispanic population would be the majority population within the state's public school system.

Dr. Kanoy advised that in 1999, the General Assembly funded the Pathways Program, which included the Department of Public Instruction, the community colleges, the independent colleges and the UNC System, and that this program has since evolved into what is now known as the College Foundation of North Carolina. Dr. Kanoy used a power point presentation (Attachment 3) and provided members with copies. He informed members that the primary goal of CFNC was to increase the college-going rate in North Carolina with particular attention toward "first-generation" college students. Dr. Kanoy illustrated the access services offered through the

internet site and he advised that CFNC had developed a resource center on the campus of UNC-Greensboro, which housed the toll free hotline and where the Spanish publications were produced for the Spanish community. Another major component of the CFNC was GEAR UP North Carolina (Gaining Early Awareness and Readiness for Undergraduate Programs), a federal grant program started in 1998. Under this program, two state grants have been secured and to date, grants totaling \$7 million with an additional \$19 million were available.

Dr. Kanoy asked Brian Williams to highlight the major information dissemination components of the College Foundation website. Mr. Williams informed members that the website had been specifically designed in a systematic, sequential order so as to engage students from the middle school level to throughout high school and into their post secondary education. Mr. Williams also pointed out that an early outreach component within the site's Career Center empowered and inspired students at an early age to plan for a college education. He advised they were able to offer a Test Prep Service to student at no cost, enabling them to better prepare for college entrance exams. Mr. Williams explained the Student Planner component of the website, which enabled students and their counselors to plan a course of study from the eighth grade through high school, satisfying the 4-year accountability component required by the Department of Public Instruction. Mr. Williams also pointed out that all 110 state colleges and universities, two-year or four-year, public and private, participated in and accepted the CFNC on-line application, and that fifty-two (52) of these institutions used the CFNC application exclusively. Mr. Williams urged members to visit the site and become familiar with it.

In closing, Mr. Williams informed members that the Foundation was sensitive to the teacher shortage issue and the critical need for teachers in the state. To assist in this area, the Foundation had created the Teacher Education module on the Career Center section of the website. This component was designed specifically for students who were interested in pursuing a teaching career. Mr. Williams also advised that the School Counselor module was being enhanced that the new features would enable both middle school and high school counselors to track and follow their student's application process.

The Chair recognized members for questions. Sen. Dorsett asked if applicants of the Teaching Fellows Program, who were not selected into the Program, were considered as a resource to address the teacher shortage issue. Mr. Williams responded affirmatively and informed members that when the Teacher Education module was developed, the focus group was comprised of different teachers, an administrator, and also included a teaching fellow on the design team. He further assured Sen. Dorsett their plans were in place to include teaching fellows in future projects.

Rep. Pate was recognized and asked if the College Foundation was working to reach all students in the state seeking a college admission, such as those being home schooled or attending private schools. Mr. Williams responded affirmatively that opportunities were extended to all students and all school counselors throughout the state.

Rep. Tolson asked if school counselors were actively participating in the training process offered by the Foundation and Mr. Williams responded affirmatively that the response had been phenomenal with over 3,500 school counselors actively participating.

Rep. Lucas asked if students had the ability to send their applications to more than one school when applying online. Mr. Williams responded affirmatively that school counselors encouraged students to apply to multiple schools so that if their first choice was not available, their other choices would be considered. The Chair thanked Mr. Williams for his informative presentation.

Chairman Swindell recognized Susan McCracken of GEAR UP NC. Ms. McCracken reported that GEAR UP was a federally funded, pre-college initiative established by the US Department of Education and signed into law in 1998 to address the growing gap between the number of students from low-income families and the number of students from higher income families who were able to go to college. She advised that currently there were 43 programs operating throughout the 100 counties statewide. Ms. McCracken advised that the main goal of the GEAR UP Program was to increase the number of low-income high school students who enter college and successfully complete a post-secondary education. She pointed out that there were two features that made their program unique from other programs with a similar focus (1) GEAR UP works with cohorts of students from as early as the 7th grade and in schools where 50% of the students are on a free or reduced lunch program. They work with the entire group of students until they matriculate to the 12th grade, graduate and enroll in college; and, (2) by significantly investing in professional development for teachers, they have created a sustainable and a systemic program that continues after the federal funding ends. Ms. McCracken played a portion of a video that was prepared and broadcast over UNC-TV about the program. Ms. McCracken also highlighted the Summer Enrichment Program and the Transition Program and explained how federal funds were distributed through both statewide initiatives and local regional partnerships. Ms. McCracken reported that since 2000 they have been tracking the first cohort of seventh grade students, and 87% of those students, who will graduate this year, have reported an intention to achieve a 2-year or 4-year degree.

Ms. McCracken next introduced Tony Tyson, a student from Greene Central High School and who has been involved with the GEAR UP Program since the 7th Grade. Tony spoke about his experience using the College Foundation of North Carolina website and how the GEAR UP Program prepared him for college. The Chair thanked Mr. Tyson at the conclusion of his remarks and recognized both Reps. Warren and Preston who commended him for his accomplishments. The Chair thanked Ms. McCracken for her informative presentation.

The Chair turned the presentation back to Dr. Kanoy for his closing remarks. Dr. Kanoy informed members that North Carolina had become a model and the states of Georgia, Kentucky, Utah, Illinois, Tennessee, Oklahoma and Colorado had all replicated North Carolina's College Foundation Program. Dr. Kanoy advised that future plans were to move from College Access into College Access and Success and the Foundation's goal would be to insure availability of the best tools for college planning for all students in North Carolina and to have a GEAR UP Program in all 100 counties. The Chairman thanked Dr. Kanoy for his presentation.

The Chairman next recognized Dr. Steve Brooks, Executive Director, State Education Assistance Authority. Dr. Brooks gave a broad overview of need-based financial aid and he also informed members about critical career shortage programs, which have been enacted by the state to address the critical shortages in the teaching profession. Dr. Brooks stated that the basic principle behind all need-based aid programs is that the primary responsible to pay for a college education does not rest with the state, the federal government or the campus, but with the student

or the student's family and that need-based aid was available to make up the difference between what the student and the student's family could reasonably afford and what the actual cost was to attend college. Dr. Brooks stated their goals were to provide access to college who would not be able to go otherwise and to assist students with choosing the program that is right for them. Dr. Brooks briefly explained both the process for evaluating a family's college contribution and the filing process for financial aid and he highlighted several of the need-based grants that were available for specific undergraduate programs.

Return to Work Following Retirement

Sen. Swindell recognized Leslie Winner, UNC Vice President for Legal Affairs and General Counsel, to comment on the issue of teachers returning to work after retirement. As background, Ms. Winner advised that in last year's budget the General Assembly changed the definition of retirement such that a state employee who retired could not return to work for any state agency for six (6) months after they retired and there could be no pre-termination of rehiring agreements.

Vice President expressed concern about the changes adopted as being both very detrimental in the University System's ability to carry out its teaching and service mission and how the change effects the efficient administration of the University. She stated the changes were more restrictive than necessary to comply with federal tax law or to deal with any of the abuses the System may have been experiencing. She pointed out how the changes in the laws affected UNC, as opposed to the rest of state government and she gave examples of how the University utilized retirees, rehiring them before the law was adopted, in both the lower-end workforce and where highly skilled employees were needed. She gave specific examples of how changes in the law have affected faculty shortages in their medical programs.

Vice President Winner stated there was no evidence to indicate that UNC employees who retired and returned to work were either abusing the system or that the average retirement age was going down because they were returning to work. Member were directed members to Table 1, Age Distribution of Tenure Track Faculty in the UNC System, Selected Years (Attachment 7) and Figure 1, Age Distribution of Tenure Track Faculty in the UNC System, 1982-2003 (Attachment 8). Table 1 illustrated that less than 20% of the UNC faculty was under the age of 40 and in contrast, over 50% of the UNC faculty was over the age of 50, and the corresponding Figure 1 graph illustrated that the faculty was "aging out." Vice President Winner stated that without the ability to retain this expertise and service, the effect would be detrimental to the University System. Additionally, she illustrated with Table 2, Average Retirement Age, 2000-2004 (Attachment 9) that data indicated faculty and non-faculty were retiring at a later age – another indicator that the system was not being abused.

Vice President Winner also advised that after consulting with tax counsel as to what IRS required for the state retirement system to be in compliance with the IRS rules, two things were clear: (1) the IRS does not have a prohibition of pre-termination agreements. The IRS guidance only applies to people who retire below what they refer to as the "normal" retirement age, with the normal retirement age set by an employer. She further stated that if a retirement age is set, then from an IRS perspective, whatever rules are in place by an employer about returning to

work, only apply to those people who are below the retirement age. She stated IRS is not concerned with employees above the retirement age, and (2) even for those employees who are younger than the normal retirement age when they retire, the 6-month gap enacted by the General Assembly is a much longer gap than the IRS requires. An informal survey conducted by the system of other state universities, showed that no states required a 6-month gap. She further advised that Virginia, Tennessee and Georgia all either had a 30 or a 60-day gap.

Vice President Winner advised about additional problems created by the provision because, in addition to the State Retirement System, some faculty and higher-level employees participated in an optional retirement program. Under the optional retirement program, the current law does not apply. Additionally, Vice President Winner explained how the restrictive rule has affected their Phased-Retirement Program, a program considered to be a national model. She stated that unless the restrictive rule was exempted, the University would not be able to continue to run the Phased-Retirement Program.

In closing, Vice President Winner offered the following four suggestions to the committee for consideration:

- (1) the General Assembly, on behalf of the State Retirement System, adopt 59 ½ years as the “normal” retirement age. The University System would, in turn, adopt the same normal retirement age for their plans.
- (2) include an exception that would allow an employee to return for a limited period of time to provide transitional services.
- (3) have a different gap for 12-month employees than for 9- and 10-month employees.
- (4) remove the sunset provision from the Phased Retirement Plan.

At the conclusion of her presentation, Vice President Winner responded to questions.

Senator Lucas asked what current was the normal age that teachers were retiring – if it was not 59 ½, what age was it? Vice President Winner responded that based on data over a 5-year period teachers were retiring at age 62; and teachers in the phased-retirement program on average retired closer to age 64; EPA staff retired at 61 and SPA employees retired at 59.

Senator Stevens asked staff to explain what predicated the legislation that increased the period for returning to work. Staff responded that based on conversations over the past several years between legislators, the state retirement system staff and IRS staff, there was a need to get a clear definition as to what is required for a break in service and the provision that allowed teachers to return to work was what triggered all of the conversation on this issue. In response to further clarification about the status of an IRS ruling, staff informed committee that although a ruling was never rendered by IRS, and because retirement plans are structured differently from state to state and were therefore not comparable, it was the sense that a 6-month break in service would clearly satisfy an IRS requirement and the question remains if a lesser amount of time would be acceptable.

Sen. Swindell recognized Rep. Bell who advised the committee that previously a subcommittee had been named by the House Pensions and Retirement Committee to study the IRS rule in question, and he commented that even after meeting in Washington, DC with IRS officials, no conclusive opinion was offered. He did, however, state that IRS officials implied during their meeting that after a person retires, there should be a clear interval of service before returning to work.

Rep. Glazier commented for the record that, in his opinion, the passage of the legislation, requiring a 6-month break in service was probably the worse decision made in the last session, having the most dramatic and negative consequences to both our citizens and our students across the state in K-20. It has devastating effects to all schools, particularly in rural school districts and clearly at the community college and university levels. He further stated that we are only just beginning to experience the problems, and it is paramount that the Legislature review, revise and reconsider this decision.

Rep. Yongue concurred with Rep. Glazier's remarks.

Sen. Dannelly stated that he concurred also both Rep. Glazier's and Chairman Yongue, and he requested a clearer explanation of costs if retirees returned to work because, he felt estimates were inflated. He agreed that the legislation needed to be revamped.

At this time, the Chairman asked members to postpone further questions about this issue until such time as appropriate legislative staff and personnel from the State Treasurer's staff were available. He urged members to write or email their concerns to the appropriate legislative staff.

The Chair next recognized Dr. Gordon Burns, President of Wilkes Community College and President of the North Carolina Community College Presidents Association. Dr. Gordon thanked the chair and committee members for their continued support of the community college system and as a representative of the community college system, he reiterated opposition to the 6-month break in service and recommending that G.S. 135 -1(20, Section 29.28(h) be reconsidered by the General Assembly and that the "separation" period be redefined as a maximum of 30 days. Dr. Burns provided a handout (Attachment 10) showing data from the Southern Regional Education Board (SREB) that documented the periods of separation from 13 other southern states. Sen. Swindell thanked him for his report.

The Chair recognized Ed Wilson, President of Wayne Community College, who also spoke in support of rescinding the provision requiring the 6-month break in service for retirees and cited several examples of how the retirement provision had affected Wayne Community College.

The Co-chairs conferred and appointed a subcommittee charged with the responsibility of meeting with appropriate legislative staff and personnel from the Treasurer's Office to clarify what could be done to address the concerns brought about by this legislation and he asked that the subcommittee report their findings back to the Committee. The subcommittee would be co-chaired by Sen. Dannelly and Rep. Glazier and members named were Reps. Carney, Pate, and Lucas and Sens. Atwater, Dorsett, and Stephens.

The Chairman next recognized Katherine Joyce, Interim Executive Director of the North Carolina Association of School Administrators. Ms. Joyce shared some of the negative consequences caused by the changes in the return to work provision and gave examples of how the new law had impacted school districts throughout the state. Ms. Joyce provided a handout of what the law requires and listed some recommendations as solutions (Attachment 11). She also provided members with a list concerns that the Association was receiving from school districts statewide (Attachment 12). Ms. Joyce reiterated that a 6-month break in service was excessive, putting North Carolina at a disadvantage competitively in getting veteran educators to return to work, especially where school districts bordered neighboring states. In summary, Ms. Joyce urged the committee to be proactive in sending forth recommendations to the 2006 General Assembly to improve the law. She also urged that the Legislature shorten the 6-month break in service, establish less restrictive requirements for retirees, and clarify the law to allow retirees to be employed in the private sector and paid with private funds.

The Chair recognized Sen. Stevens who asked whether this same rule change applied to the Local Government Retirement System, to the Judicial Retirement System, the Law Enforcement Officers' Retirement System or to the Legislative Retirement System, and the Chair directed Sen. Stevens' question to the subcommittee on retirement charged with studying this matter. The Chair thanked Ms. Joyce for her presentation.

Before adjournment, Chairman Swindell announced that because the Emerging Issues Forum was meeting on February 6 and 7, the next committee meeting would be a one-day only on February 8 at 9 a.m. He also announced that on March 7 and 8, 2006, the committee would be visiting several schools in Nash and Wilson counties. This site visits in March would be in addition to a regular two-day meeting in Raleigh on March 20 and 21. Additionally, the Committee would be visiting sites in Scotland County on April 4 and 5 and the final meeting to consider recommendations would be held in later April. The Chair asked that the subcommittee appointed to study the retirement provision proceed to meet and be prepared to report their recommendations to the full committee in April.

Sen. Stevens asked whether the Committee would be briefed on the NC WISE program and the Chair responded affirmatively that an update was scheduled for the February 8 meeting.

The Chairman adjourned the meeting at 12:30 p.m.

Respectfully submitted,

A. B. Swindell

ATTEST:

Mo Hudson, Committee Clerk

Draft Minutes
Joint Legislative Education Oversight Committee
2005-2006 Session
April 25, 2006

The Joint Legislative Education Oversight Committee met on Tuesday, April 25, 2006 at 10 a.m. in Room 643 of the Legislative Office Building. Chairman Yongue presided and members in attendance were Senators Swindell; Atwater; Dorsett; Hartsell; Malone; Nesbitt; Stevens; Representatives Bell; Glazier; Insko; Jeffus; Lucas; McLawhorn; Preston; Sauls; Tolson and Warren. Committee clerks and members of the legislative research staff were also in attendance. A visitor registration sheet is attached (Attachment 1).

Chairman Yongue called the meeting to order at 10:15 a.m. and welcomed members and guests to the meeting. He noted that Martha Gaddison and Martha Parrish were serving the meeting from the House Sergeant-At-Arms and Curtis Dowd, Stan Johnson and John Fitchett were serving the meeting from the Senate Sergeant-At-Arms staff. Chairman Yongue advised that before discussing the committee's proposed recommendations for the 2006 Session, several items were added to the agenda.

Communities in Schools

The Chair recognized Ms. Linda Harrill, President and CEO, Communities In Schools (CIS) presented a perspective of the state's current standing, of where the state needs to be, and the direction in which the state is moving. Ms. Harrill introduced Mike Stephens, Executive Vice President and Chief Operating Officer, who oversees all budget and financial internal operations, and who also serves as a member of their Audit Committee. Ms. Harrill also introduced Ms. Evelyn Hawthorne, who serves part time as their governmental liaison. Ms. Harrill advised that CIS began in 1989 and she briefed members on their mission. She advised that CIS currently serves 36 local communities and schools in 57 counties throughout the state and she reviewed a fact sheet which outlined their local program funding (Attachment 2). Ms. Harrill reported that twenty additional counties had requested assistance with their school dropout problem, but current funds and resources could not meet those needs. She requested their recurring appropriation be increased by an additional \$500,000 (Attachment 3). Ms. Harrill responded to several questions and thanked the committee for their continued support. Sen. Nesbitt was recognized and spoke in support of Communities In Schools Program and moved the board approve the request for additional funding and that the committee's final report be amended to reflect this addition. Chairman Yongue directed staff to draft an amendment to be added to the final report on Page 9 as Item 11. Dropout Prevention/Communities in Schools.

Disadvantaged Student Supplemental Funding (DSSF)

Chairman Yongue next called on Dr. Elsie Leak, Associate Superintendent of Curriculum and School Reform Services, Department of Public Instruction, to report on the Disadvantaged Student Supplemental Funding (DSSF). As background, Dr. Leak

advised that in 2004, the General Assembly provided additional funding to the State Board to assist 16 districts identified as needing assistance with recruiting and retaining of teachers and to improve student achievement. She advised that goals were established to develop strategies to recruit and retain teachers and to reduce the number of students in the district scoring below grade level. She advised that these districts were provided formats for an action plan and a budget plan approved by the State Board and that team members from DPI were assigned to coach and assist school superintendents with implementing these plans. She reported that although strategy sessions were held, barriers still existed that kept certified teachers from remaining in these districts and she advised that certified teachers were unavailable in one high school to teach science and math.

Dr. Leak directed members to a handout entitled, Executive Summary (Attachment 4) and advised this was a draft report expected to be adopted by the State Board the following week. She directed the committee to Page 10 of the draft report which addressed the funding and resources of the District Assistance Programs and advised that a two-year evaluation was being conducted by Dr. Charles Thompson that would identify effective strategies to improve teacher recruitment and retention and student achievement. She reported results would be available in December, 2006 and would be disseminated to all LEAs.

Dr. Leak advised that the \$500,000 appropriation was adequate for 2004-05, but it was not adequate to support the program for the entire 2005-06 school year. She advised that the Agency did not have enough human resources to provide the service, technical assistance, coaching and other follow-up support required to implement an effective district assistance program statewide and meet the other demands for school assistance. She further advised that funding resources were needed to train team members to serve and provide technical assistance. She stated that by the end of February, 2006, the LEA Assistance Program (LEAAP) budget was in deficit and State Assistance Team funding was being used to subsidize the LEAAP budget. Dr. Leak provided a handout which listed the 16 school districts receiving assistance with their allotment (Attachment 5).

Following her report, Dr. Leak responded to several questions. Sen. Malone asked for clarification to Title I LEAs, which was listed in the draft summary as a priority under federal eligibility criteria. Following discussion about the lack of funding for the program, Representative Insko suggested that possibly the program was trying to assist too many districts and asked the chairs to take a closer look at this program during the next legislative interim. Chairman Yongue thanked Dr. Leak for her presentation and noted that the Committee would be presenting their recommendations with regard to this program later on the agenda.

Retirees Return-to-Work Provision

Chairman Yongue recognized Rep. Glazier, Co-chair with Sen. Dannelly of the subcommittee appointed by committee chairs to study the retirees return-to-work provision adopted during the last legislative session. Representative Glazier expressed appreciation to Co-chair Dannelly and members of the subcommittee, as well as legislative staff, for their expertise in drafting the proposed legislation, and members of

the various education agencies who provided input under the direction of the subcommittee.

Rep. Glazier provided copies of the proposed legislation, Bill Draft 2005-LL-219 [v.11] (Attachment 6) as well a summary prepared by staff (Attachment 7). He advised that the UNC System, NC Community College System, the NC School Boards Association, NCAE, the North Carolina Superintendents and Administrators Association and the State Board all agreed to and endorsed this draft legislation. Following his presentation, Chairman Yongue presented an amendment submitted by Rep. Glazier to the proposed legislation (Attachment 8) and copies of the amendment were distributed. After explaining the amendment, Sen. Dorsett moved its approval and it was unanimously passed by the committee. Chairman Yongue advised the proposed retirees return-to-work legislation would be included as a part of the full committee report to be presented following lunch. Chairman Yongue commended the subcommittee for their diligent work on drafting the legislation.

Chairman Yongue recessed the meeting at 12 noon to return at 1 p.m.

Chairman Yongue reconvened the meeting at 1:05 p.m. and directed members to the draft report of the Joint Committee to be presented to the 2006 Session of the General Assembly.

Proposed Report, Findings, and Recommendations to 2006 Session

The Chair recognized Robin Johnson, committee counsel on the legislative staff to present the recommendations (Attachment 9). Following the presentation of Item 1, Teacher Retention and Recruitment, Sen. Dorsett asked that additional language be added to include special emphasis placed on incentives for hiring minorities and male teachers. The chairs endorsed Sen. Dorsett's request.

Items 2 and 3 were reviewed as presented. Ms. Johnson reviewed Item 4 along with the corresponding draft legislation on Page 21. After discussion of Bill Draft 2005-RHz-10, Rep. Glazier asked that a clause be added which would address the time frame for professional development. The Chairs concurred.

Ms. Johnson continued review of Items 5 through 10. Following Ms. Johnson's review of Item 10, Global Education, Senator Dorsett urged the committee to support expanding foreign languages offered in schools. In this regard, Chairman Yongue recognized Rep. Glazier, who advised that he and Sen. Hagan were drafting legislation that would appropriate funds to develop and implement a pilot program to provide classes in Chinese language, culture, geography, political, legal and economic systems.

Rep. Tolson asked Chairman Yongue if it was appropriate at this time for the committee to also consider funding teacher assistants, who were working to complete their teacher education degree.

At this point in the presentation, Chairman Yongue asked Dr. Leak to present recommendations from the Foreign Language Task Force Meeting held on March 9, 2006. Dr. Leak, assisted by Helga Fasciano, second languages consultant at Department of Public Instruction, presented recommendations (Attachment 10) from the Task Force. Following discussion, Rep. Tolson moved the committee support adoption of the Foreign Language Task Force recommendations, as well as legislation which would fund teacher assistants working to complete their education degree. Motion carried.

Chairman Yongue next asked Ms. Johnson to present the following amendments to the final report:

(1) Ms. Johnson read an amendment offered by Senator Nesbitt which would address Dropout Prevention, Communities In Schools (Attachment 4). Sen. Swindell moved adoption, and the amendment was unanimously approved (Attachment 11).

(2) Ms. Johnson read an amendment offered by Sen. Dorsett regarding Teacher Retention and Recruitment stating that special emphasis be placed on recruiting minorities and males into teaching. Sen. Dorsett moved approval and the amendment unanimously passed. (Attachment 12)

(3) Ms. Johnson read an amendment offered by Sen. Stevens which supports expanding scholarships and scholarship loan funds for students enrolled in nursing programs at public institutions of higher education. Sen. Stevens moved approval, and the amendment passed unanimously. (Attachment 13)

(4) Ms. Johnson read an amendment offered by Chairman Yongue to Draft Bill 2005-RQ-5 [v.5] by inserting on Page 5 of the Draft Bill (Page 28 of the Report) the language "Section 8. There is appropriated from the General Fund to the State Education Assistance Authority the sum of one million five hundred thousand dollars (\$1,500,000) for the 2006-2007 fiscal year to implement this act." and by renumbering the remaining sections accordingly. Chairman Swindell moved approval of the amendment and it passed unanimously. (Attachment 14)

(5) Rep. Glazier moved the committee adopt Bill Draft 2005-LE-245 [v.4] (Attachment 15) and presented an amendment which would broaden the language to read, "Chinese, or any other foreign language not currently taught in the public schools, for which that LEA wants to develop a pilot and which DPI authorizes." Sen. Swindell moved approval of the proposed legislation, as amended, and the amended bill draft was unanimously adopted.

(6) At the request of Rep. Glazier an amendment prepared by staff which added language on Page 7, Item 4 (Attachment 16) of the report that encouraged the Board of Governors and the State Board to evaluate and revise professional development programs for teachers. A motion was offered and the amendment passed unanimously.

Following adoption of the amendments, Chairman Yongue asked for a motion to adopt the full report, findings and recommendations to include the amendments, and authorized

staff to make any technical changes. Rep. Lucas moved approval of the report and motion passed unanimously.

Before adjourning, Rep. Glazier asked about the status of the school transportation study that was due to Joint Education Oversight Committee in March, 2006. Rebecca Garland, State Board of Education, was recognized and advised that the report was still being drafted and it would be available in the next few weeks.

Rep. Carney was recognized and commended the Co-chairs for setting up the field trips in Wilson and Scotland County and having the committee visit local sites. She extended an invite for the committee to visit in Mecklenburg County in the future.

There being no further business to come before the committee, Chairman Yongue thanked the members for their attendance at all the meetings and adjourned the meeting at 2:10 p.m.

Respectfully submitted,

Rep. Douglas Yongue, Co-chair

ATTEST:

Mo Hudson, Committee Clerk

Minutes November 29, 2005

The Joint legislative Education Oversight Committee met on Tuesday, November 29, 2005 at 10:00 a.m. in Room 643 in the Legislative Office Building. Chairman Yongue presided over the meeting. The following members were present: Representatives Bell, Carney, Glazier, Grady, Insko, Jeffus, Lucas, McLawhorn, Pate, Preston, Sauls, Tolson, Warren; Chairman Swindell and Senators Atwater, Cowell, Dannelly, Dorsett, Garwood, Hartsell, Lucas, Malone, and Stevens. See attendance record and visitor registration in *attachments 1 and 2*.

Chairman Yongue welcomed members and started the meeting by recognizing Dr. Larry Price, Superintendent, Wilson County Schools, for being awarded the superintendent of the Year award by the North Carolina Association of School Administrators. Senator Swindell also recognized Dr. Price for the progress made in his tenure. Chairman Yongue also wished Representative Sauls a happy birthday. Chairman Yongue then introduced the Sergeant-at-Arms. As the first item on the agenda, Chairman Yongue asked for a motion to approve the minutes from the three previous meetings. Representative Bell offered a motion. The motion passed with unanimous support.

Budget/ Authorizing Legislation/ Studies

As the next order of committee business, Chairman Yongue invited Robin Johnson, Staff Attorney, to briefly review the authorizing legislation, committee budget, studies assigned, and reports due to the committee. Senator Dannelly offered a motion to approve the committee budget. The motion carried unanimously.

Spotlight on 2005 Education Legislation

Shirley Iorio, Committee Analyst, presented 2005 Education Legislation – a comprehensive document categorized by K-12, Higher Education, Community College, University, and Studies sections with the corresponding appropriations. See *attachment 3*. Ms. Iorio also announced that the publication is available on the NC General Assembly website – www.ncleg.net.

Teacher Shortage

Dr. Kathy Sullivan, Director of Human Resource Management/ Quality Professionals, Department of Public Instruction, presented the latest information available on the teacher shortage. See *attachment 4*. Dr. Sullivan reported that North Carolina has hired about 10,000 new teachers per year over the past five years – due to retirement, career changes, class-size reduction, and increasing student enrollment. About one third of these new hires were lateral entry. Another third were recent teacher education program graduates from North Carolina's colleges and universities. And the remaining third of the new hires were from other states. Over the past year, new hires were comprised of 25% lateral entry, 30% recent NC college and university trained teacher education prep graduates, and 45% had completed teacher education programs in other states. There has been a 4% increase in the number of vacancies (971) compared to 2004-2005. There were more vacancies among Speech Pathology teachers. Forty LEAs reported fewer vacancies in 2005, 19 reported no change, and 56 reported more vacancies.

LEAs were provided an additional 1,058 teaching positions in the initial 2005-2006 allotments. The number of vacancies, by region, was quite different with the west having the fewest vacancies, and the piedmont/triangle having the most.

Dr. Kathy Sullivan reported that vacancies vary by license areas from year to year with preschool and elementary increasing in 2005, while middle school vacancies decreased. The report, according to Dr. Sullivan, included information on highly qualified teacher data with Camden, Polk, and Yancey Counties being the top three districts with the most highly qualified, licensed teachers. Jones County, Hyde County, and Weldon City have the greatest need for highly qualified, licensed teachers. Middle and high school Math and Science, as well as exceptional children, are the license areas with the most critical shortages. Overall, the bulk of university trained, highly qualified, licensed teachers, comes from about five states. Representatives McLawhorn, Pate, and Glazier asked Dr. Sullivan questions for clarity. Representatives Pate and Warren asked Dr. Sullivan to present data in the future exploring the effect on the number of highly qualified teachers and local salary supplements, population growth, Annual Yearly Progress (AYP), and class size reduction. Senator Hartsell asked which five states produce the bulk of licensed teachers for the rest of the country. Dr. Sullivan promised to provide this information to the entire committee.

Dr. Sullivan concluded with a review of the recent compromise reached on the teacher licensure reciprocity issue generated by House Bill 706 – sponsored by Representatives Yongue, Carney, Johnson, and Preston. The compromise adds an evaluation of an incoming highly qualified, licensed teacher from out-of-state – including information on the teacher's ability to impact student learning and verification of re-employment by the local education agency (LEA). The language will be offered to teachers as an option in achieving their continuing license after three successful years of teaching. Representative Pate inquired about the meaning of "positively impacting". Dr. Sullivan explained that this evaluation mechanism is not definitive yet. She assured the committee that principals would evaluate teachers with a fair, uniform measurement. Chairman Yongue explained that the State Board of Education would work out these details in the evaluation process. Representative Glazier worried that the regulations would not be approved in time to recruit new teachers in the fall. However, Dr. Sullivan assured Representative Glazier that LEAs would have this option in January in order to use for recruitment for fall 2006.

Teacher Working Conditions Survey

Eric Hirsch, Executive Director, Center for Teacher Quality in Chapel Hill, NC presented the Teacher Working Conditions Survey to the committee. The Center for Teacher Quality conducted this research nationally as it relates to teacher retention. North Carolina's teacher turnover rate was 12.95% in 2004-2005. Some schools, according to Dr. Hirsch, lose as much as 40% of their teachers from year to year. Each teacher loss costs the state about \$11,000.00. The cost is as great as \$50,000.00 when you consider the LEA investment in professional development, induction, and hiring. Mr. Hirsch explained that the findings of the survey as it relates to salary confirm that salary is necessary, but not sufficient. Mr. Hirsch first singled out *leadership* as the single greatest predictor of AYP at middle schools. The major findings are time, facilities and resources, leadership, empowerment, professional development, a collegial atmosphere, and salary. As it relates to time, two thirds of the participating teachers in North

Carolina spend on average five hours per week outside of the school day. As it relates to facilities and resources – the responses varied among teachers widely – with some teachers very satisfied and others not feeling equipped. In regards to professional development, Mr. Hirsch reported that teachers seem satisfied with the content of professional development, but not with the amount available. Mr. Hirsch stressed a strong correlation between time, empowerment, professional development, and collegial atmosphere.

The survey found that teachers and principals view the working conditions differently, due to differences in perception especially in the areas of planning time and protection from duties that interfere with teaching responsibilities. Principals, according to the survey, strongly agree that they are addressing issues related to time. Teachers obviously do not agree. Teachers cited a need for more professional development in working with diverse learners. Mr. Hirsch stressed the importance of this data. For example, 50,000 teachers are dissatisfied with administrative support. The survey conducted in 2002, 2004, will again be administered in 2006. The response rate was about 40% in 2002 and again in 2004. Comments from the committee suggested that successful strategies should be documented and shared and adequate resources should be provided in order for schools and LEAs to improve. Finally, Mr. Hirsch stressed the importance in investing in what matters most for improving teacher working conditions and ensuring high quality teachers – time and empowerment. The website for reference to these surveys is <http://twc.learnnc.org>. See *attachment 5*.

Dr. Larry Price, Superintendent of the Year, Wilson County schools shared his thoughts regarding the working conditions survey and how his district is responding to the results. Each school is asked to review the information obtained from the survey and work as a school to correct and improve on these concerns reported anonymously by teachers. Dr. Price reminded legislators that the findings from the survey should not require any policy action. Instead, Dr. Price said that each LEA and school should individually address the concerns reported within the legislative mandated school improvement plans. Following this presentation, the committee recessed for lunch, to reconvene at 1:45 pm.

Teacher Recruitment and Retention Proposals

Dr. Jane Norwood, Vice Chair of the State Board of Education and Chair of the Teacher Recruitment and Retention Task Force, reported to members on the report and recommendations of the task force. Task force members were comprised of two NEA members, two NC School Board Association members, Senator Swindell, Representative Glazier, and others from supporting education organizations. The task force set out to examine the following issues: Planning time, instructional time, instructional materials, supplies, and technology, school improvement teams, compensation for additional responsibilities, National Board Certified teachers, programs preparation, induction and continued professional development, administrator support and accountability, evaluation, time and workload, enhancing the image of the profession and barriers to entering the profession, recruitment and marketing, teacher preparation, student teaching, assessments, beginning teacher support and mentoring, program funding, best practices, accountability, financial incentives (salaries, benefits, bonuses, employment of retired teachers, portability of pensions and retirement, adjustments to salary schedule, adjustment of master's degree salary differential, and support for continued

professional study). Each of these areas has specific recommendations, some of which have already been addressed by the State Board of Education. See *attachment 6* for the recommendations. Members applauded the recommendations.

Ann McArthur, Teacher Advisor presented from Governor Easley's office an overview of teacher recruitment and retention based on information gained in the working conditions surveys done previously. Ms. McArthur presented accomplishments and concerns of the Governor's office in collaboration with the legislature, as a result of the Teacher Recruitment and Retention Task Force. Ms. McArthur reviewed recent policy action addressing school leadership, Leandro funding, planning time for teachers, expansion of Learn and Earn, the New Schools Project, and the Governor's 21st Century High Schools, Disadvantaged Student Supplemental Fund (DSSF), and Low-Wealth funding. Ms. McArthur notified members of the committee that an advisory board would encourage a higher response rate to the Teacher Working Conditions Survey among teachers during the next few months See *attachment 7*.

Mr. Dan Gerlach, Senior Policy Advisor for Fiscal Affairs, Office of Governor Easley, reviewed Governor Easley's plan to raise teacher salaries to the national average (\$52,266) in four years. It is anticipated the cost of this goal will be an additional \$150 million annually over the next three years in addition to the continuing funding provided for salaries for 2005-2006. Mr. Gerlach reviewed several areas that the Governor plans to address in the 2006 budget recommendations. Governor Easley, according to Mr. Gerlach, plans to increase Learn and Earn funding by \$15 million annually over the next three years, increase DSSF funding, and further address teacher recruitment and retention. The lottery proceeds were discussed and how they would benefit the public schools with two new programs – need-based scholarships and school construction funding – and two existing programs – Smart Start and class-size reduction. In addition, the Governor plans to fully fund the low-wealth formula of more than \$30 million. Several committee members asked whether or not lottery proceeds would supplant the existing public school funds being budgeted. Mr. Gerlach dispelled that notion. However, committee members still expressed their concerns about the real possibility that this might occur. Chairman Yonque indicated the statewide school construction needs survey due to be completed early in 2006 would probably continue to reveal needs of more than \$6 billion, which may need to be addressed in the budget since lottery proceeds will not be sufficient, especially in high growth LEAs.

Mr. Eddie Davis, President, North Carolina Association of Educators (NCAE) presented attachment 8 which includes a wealth of information on teacher vacancies, reasons teachers leave the profession, and reasons teachers stay in the profession. Charts showing salary compensation and national ranking, trends in salaries, average salary in the southeast (North Carolina is ranked third) were also reviewed. Mr. Davis compared teacher turnover rates in LEAs where local supplements were paid. Finally, he presented the desires of NCAE to compress the salary schedule from thirty steps to fourteen steps with the initial step at \$3,000 per month and \$6,000 per month for the final salary step. He reported surrounding states have between 14 and 28 steps in their salary schedules, with Georgia having only fourteen. NCAE's additional legislative priorities include raising the beginning salary of teachers, establishing as many training columns as possible with differentials, and continue longevity salary supplements, and improving classified educational support personnel salary schedules.

Dr. Ellen Greaves, Executive Director, Professional Educators of North Carolina presented their vision for public education as well as some recommendations beginning with the establishment of a salary study commission to work on begging teacher salaries. Dr. Greaves explained the need to address the teacher working conditions survey and to increase K-12 funding in the areas of class-size reduction, additional funding for textbooks, improved principal training, improved teacher resources, more assistant principal positions, and additional funding for mentors for beginning teachers. PENC developed a new teacher guide as a supplement to the mentor program. See *attachment 9*.

Chairman Yongue thanked members for attending and for their patience. He also announced the following working dinner at 6:00 p.m. as part of this Joint Legislative Education Oversight Committee. Chairman Yongue recessed until 6:00 p.m.

The Joint Legislative Education Oversight Committee reconvened at 6:00 p.m. in Room 150 in the Education Building. Committee members joined the State Board of Education to meet jointly. See *attachment 10* for agenda. State Board of Education Chairman Mr. Howard Lee along with Superintendent of Public Instruction, Ms. June Atkinson welcomed committee members and thanked them for their attendance. Chairman Yongue and fellow Co-Chairman, Senator Swindell followed by thanking Chairman Lee, Superintendent Atkinson and the State Board of Education for dinner and the opportunity to meet.

Chairman Lee presented the 2006 legislative priorities of the State Board of Education. See *attachment 11*.

Deputy Superintendent Janice Davis presented an update on North Carolina's progress on high school reform. See *attachment 12*.

The Deans' Panel on Select University Programs presented next on teacher shortage issues. Dr. Thomas James, Dean of the UNC-Chapel Hill School of Education addressed the committee first, explaining the efforts under way to increase the number of quality teacher education graduates. Dr. James was followed by Dr. Cecilia Steppe-Jones, Dean of NC Central University, School of Education, and finally Dr. Karen Nery, Dean of Campbell University, School of Education.

Dr. Richard Thompson, Vice-President, UNC General Administration, UNC and Dr. Hope Williams, President, NC Independent Colleges and Universities addressed the committee. Dr. Thompson and Dr. Williams emphasized the importance and stress of attracting new prospective teachers to traditional teacher preparation programs.

November 30, 2005

Minutes

The Joint legislative Education Oversight Committee met on Wednesday, November 30, 2005 in Room 643 in the Legislative Office Building. Chairman Yongue presided over the meeting. The following members were present: Representatives Bell, Carney, Glazier, Grady, Insko, Jeffus, Lucas, McLawhorn, Pate, Preston, Sauls, Tolson, Warren; Chairman Swindell and Senators Atwater, Cowell, Dannelly, Dorsett, Garwood, Hartsell, Lucas, Malone, and Stevens. See attendance record and visitor registration in *attachments 1 and 2*.

Proposal for Funding for Lateral Entry Teachers / Nurses

Chairman Yongue reconvened the meeting at 9:10 a.m., inviting Dr. Hope Williams, President, North Carolina Independent Colleges and Universities, to present information on scholarships for later entry teachers and nurses to get fully licensed. Dr. Williams told committee members that two more independent colleges were addressing the teach shortage – Brevard College and Peace College. She told members that their challenge is to find ways to encourage traditional age students to pursue the traditional route to become a fully licensed teacher by majoring in a subject area in which they seek to teach, and following through with a teacher education program. Dr. Williams stressed that the original intent behind the lateral entry concept was to draw from the experienced. This is not always the case. Dr. Williams warned that many prospective teachers have found that they can graduate from college in four years, secure a job as an unlicensed lateral entry teacher, and then pursue licensure. Dr. Williams expressed the lack of support in financial assistance to lateral entry students. The Legislative Tuition Grant, currently funded by the General Assembly, does not cover non-traditional age students returning for teacher or nursing certification. She proposed a change in statute to allow for \$1.5 million in financial assistance to students on a pro-rated basis. In response to questions raised by Representative Pate and Senator Dorsett, she reported that thirty five of the 4-year independent colleges and universities have teacher preparation programs and one 2-year institution, while seven institutions have programs supporting the licensure of prospective nurses.

Low-Wealth Funds

Ms. Lydia Prude, Section Chief for School Allotments, Financial Business and Services, Department of Public Instruction, discussed the low-wealth funding formula and eligibility requirements for the low-wealth county and small school system supplements. See *attachment 13*. Ms. Alexis Schauss, Section Chief for Information Analysis and Reporting, Financial Business and Services, Department of Public Instruction, reviewed the report due to the committee on these two funding supplements. See report in *attachment 14*.

Dr. Shirley Prince, Superintendent, Scotland County Schools, reviewed the LEA's use of low-wealth funding, as well as, the benefits and outcomes for students as a result. Please see *attachment 15* for Dr. Prince's presentation in its entirety.

Dr. Norman Shearin Jr., Superintendent, Vance County Schools, discussed use of low-wealth supplemental funding in Vance County. He reported to the committee that Vance County schools used low-wealth funding to hire more teachers in order to reduce class-size. He also told the committee that they have mandated summer school. See *attachment 16* for his presentation in its entirety.

DPI Contract Positions

Mr. Phillip Price, Associate Superintendent, Department of Public Instruction (DPI), presented the contracts for personnel and services by DPI. Presently, he reported, DPI contracts for 113 positions out of a total of 567.25 individuals. DPI has increased the number of contract positions in the information technology area, while most of the contract positions still exist in the curriculum and reform services area as well as for school assistance teams. Please see *attachment 18*. There were no questions.

Chairman Yongue closed the meeting by announcing that the December 20, 21 meetings are cancelled. The next meetings would be January 10 and 11, 2006. With no further business, Chairman Yongue adjourned the meeting at 12:00 p.m.

