



MEETING OF THE BOARD OF GOVERNORS
Committee on Educational Planning, Policies, and Programs

February 17, 2021 at 11:30 a.m.
Via Videoconference and PBS NC Live Stream
University of North Carolina System Office
Center for School Leadership Development, Board Room
Chapel Hill, North Carolina

AGENDA

OPEN SESSION

- A-1. Approval of the Minutes of January 20, 2021 Temple Sloan
- A-2. Academic Affairs Update Kimberly van Noort
- A-3. Strategic Plan Metrics and Student Success Andrew Kelly
- A-4. Section 700.1.3 of the UNC Policy Manual Proposed Revisions Kimberly van Noort
- A-5. Adaptive Courseware James Ptaszynski
- A-6. Career and College Promise and Cooperative Innovation High Schools Report Bethany Meighen

CLOSED SESSION

- A-7. 2021 Board of Governors Awards for Excellence in Teaching Kimberly van Noort

OPEN SESSION

- A-8. Adjourn

Additional Information Available

- A-6. Full Report: "Career and College Promise and Cooperative Innovation High Schools Program Report"



MEETING OF THE BOARD OF GOVERNORS
Committee on Educational Planning, Policies, and Programs
February 17, 2021

Closed Session Motion

Motion to go into closed session to:

- Prevent the premature disclosure of an honorary award or scholarship.

Pursuant to: G.S. 143-318.11(a)(2).



OPEN DRAFT MINUTES

January 20, 2021 at 9:45 a.m.
University of North Carolina System Office
Center for School Leadership Development, Room 128
Chapel Hill, North Carolina

This meeting of the Committee on Educational Planning, Policies, and Programs was presided over by Vice Chair Anna Nelson. The following committee members were present, constituting a quorum: Steven B. Long, Jimmy D. Clark, Thomas C. Goolsby, and Isaiah Green. Chancellors participating were Franklin Gilliam, Todd Roberts, and Elwood Robinson. Chair of the UNC Faculty Assembly Timothy Ives joined.

Steve Long joined the meeting at 9:52 a.m.
Chancellor Robinson at 9:55 a.m.

Staff members participating included Kimberly van Noort and David English from the UNC System Office.

OPEN SESSION

1. Call to Order and Approval of OPEN Session Minutes (Item A-1)

Chair Sloan requested Vice Chair Nelson to preside over the meeting in his absence. Vice Chair Nelson called the meeting to order at 9:48 a.m. on Wednesday, January 20, 2021.

Vice Chair Nelson reminded all members of the committee of their duty under the State Government Ethics Act to avoid conflicts of interest and appearances of conflict of interest. She asked if there were any conflicts or appearances of conflict with respect to any matter coming before the committee. No members identified any conflicts at the time. Under the new amendments to the Open Meetings Act, all votes will be taken via roll call.

Vice Chair Nelson called for a motion to approve the minutes of November 18, 2020.

MOTION: Resolved, that the Committee on Educational Planning, Policies, and Programs approve the minutes of November 18, 2020.

Motion: Thomas C. Goolsby
Motion carried

Roll Call Vote	
Clark	Yes

Goolsby	Yes
Long	Absent
Nelson	Yes
Sloan	Absent

2. Academic Affairs Update (Item A-2)

Dr. van Noort spoke about reopening plans, ongoing monitoring of enrollment, and course delivery updates across the 17 institutions.

3. UNC System Academic Program Approval Process (Item A-3)

The committee heard the details from Dr. van Noort about revisions to the academic program approval process. Section 400.1.1 of the UNC Policy Manual, *Policy on Academic Program Planning*, determines the standards for academic program planning. In June 2020, given the impacts of COVID-19, a pause was placed on the submission of new academic program establishments, allowing the opportunity for a substantive review of procedures.

4. UNC System Academic Program Actions (Item A-4)

East Carolina University requested the establishment of the following degree program:

— Master of Science in Planning and Development – (MS, CIP 04.0301)

Vice Chair Nelson called for a motion to approve the establishment of the degree program at East Carolina University.

MOTION: Resolved, that the Committee on Educational Planning, Policies, and Programs approve the requested establishment of the Master of Science in Planning and Development degree program at East Carolina University and for submission to the full board through the consent agenda.

Motion: Thomas C. Goolsby

Motion carried

Roll Call Vote	
Clark	Yes
Goolsby	Yes
Long	Yes
Nelson	Yes
Sloan	Absent

North Carolina A&T State University requested the establishment of the following degree program:

— Doctor of Philosophy in Agriculture and Environmental Sciences – (PhD, CIP 01.0000)

Vice Chair Nelson called for a motion to approve the establishment of the degree program at North Carolina A&T State University.

MOTION: Resolved, that the Committee on Educational Planning, Policies, and Programs approve the requested establishment of the Doctor of Philosophy in Agriculture and Environmental Sciences degree program at North Carolina A&T State University and for submission to the full board through the consent agenda.

Motion: Steven B. Long

Motion carried

Roll Call Vote	
Clark	Yes
Goolsby	Yes
Long	Yes
Nelson	Yes
Sloan	Absent

The University of North Carolina at Greensboro requested the discontinuation of the following degree program:

— Specialist in Education in Education Leadership – (EdS CIP 13.0401)

Vice Chair Nelson called for a motion to approve the discontinuation of the degree program at The University of North Carolina at Greensboro.

MOTION: Resolved, that the Committee on Educational Planning, Policies, and Programs approve the requested discontinuation of the Specialist in Education in Education Leadership degree program at The University of North Carolina at Greensboro and for submission to the full board through the consent agenda.

Motion: Thomas C. Goolsby

Motion carried

Roll Call Vote	
Clark	Yes
Goolsby	Yes
Long	Yes
Nelson	Yes
Sloan	Absent

5. Designing Effective Online Courses (Item A-5)

The Designing Effective Online Courses workshop was built to provide UNC System faculty with information, tools, and experiences that help them to be more successful—and more comfortable—making the transition to teaching online due to the pandemic. A summary of the genesis, creation, and impact on faculty and students was delivered.

6. Licensure Approval Programs (Item A-6)

The Committee on Educational Planning, Policies, and Programs reviewed and discussed licensure approvals for the following:

- Webber International University/Saint Andrew's University, an existing licensee, seeks licensure to offer a Master of Arts in Education.
- Thales College, an interim permit holder, seeks to offer a Bachelor of Arts in Entrepreneurial Business.
- The University of Southern California, an existing licensee, seeks to offer a Master of Public Administration.
- Watts College of Nursing seeks to convert its interim permit to a license.
- One institution, which operates in a non-SARA, (State Authorization Reciprocity Agreements), jurisdiction, seeks a limited license for one student to participate in a clinical placement in North Carolina.

Vice Chair Nelson called for a motion to approve the licensure applications.

MOTION: Resolved, that the Committee on Educational Planning, Policies, and Programs approve the above (four) licensure applications and (one) limited license and recommend approval to the Board of Governors for a vote through the consent agenda.

Motion: Thomas C. Goolsby

Motion: carried

Roll Call Vote	
Clark	Yes
Goolsby	Yes
Long	Yes
Nelson	Yes
Sloan	Absent

7. North Carolina Teaching Fellows Annual Report (Item A-7)

The committee heard a presentation of the North Carolina Teaching Fellows Program Annual Report. The NC Teaching Fellows is a forgivable-loan-for-service program that recruits high-achieving candidates into STEM and Special Education teaching areas, along with a variety of other teacher recruitment initiatives.

There being no further business and without objection, the meeting adjourned at 11:05 a.m.

Steven B. Long, Secretary



AGENDA ITEM

A-2. Academic Affairs Update..... Kimberly van Noort

Situation:	The committee will hear an update on recent activities involving academic affairs.
Background:	The University of North Carolina System's Division of Academic Affairs complements the University's core academic mission, supports faculty, and ensures success for research and sponsored and international programs. The division also provides assistance for student affairs and other access and outreach activities.
Assessment:	Information will be provided to the committee on recent updates in Academic Affairs at the UNC System Office and across the 17 institutions.
Action:	This item is for information only.

AGENDA ITEM

A-3. Strategic Plan Metrics and Student Success..... Andrew Kelly

Situation: In 2017, the Board of Governors passed the University of North Carolina System's Strategic Plan, Higher Expectations. The plan outlines robust goals focused on access, affordability, student success, and economic impact across the System.

Background: Approved in January 2017, the Strategic Plan spells out goals and metrics in five key areas: access, affordability and efficiency, student success, economic impact, and excellent and diverse institutions. After the plan was passed, the System Office established performance agreements with each constituent university that outlined institution-specific goals and metrics. In order to track System and university-level progress toward goals, the System Office created public dashboards that went live in spring 2018. Those dashboards are updated annually as new performance data are collected. Data from the 2019-20 academic year are now available for review.

Assessment: System Office staff will provide an update to the Committee on Educational Planning, Policies, and Programs on the latest data, trends, and highlights related to the System's progress on Strategic Plan goals and metrics.

Action: This item is for information only.

AGENDA ITEM

A-4. Section 700.1.3 of the UNC Policy Manual Proposed Revisions Kimberly van Noort

Situation: President Peter Hans has received a letter signed by the chancellors of the five UNC System Historically Black Universities and Colleges: Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, and Winston-Salem State University. This letter requests President Hans to take the steps necessary to increase the cap on freshmen out-of-state students from 18 percent to 25 percent by amending Section 700.1.3 of the UNC Policy Manual. The letter further requests that penalties not be assessed for any HBCU which exceeded this cap prior to Fall 2020.

Background: At its November 18, 2020 meeting, the Committee on Educational Planning, Policies, and Programs discussed the 18 percent cap in the context of three universities which had exceeded the cap for the fall 2020 incoming freshmen class. The committee asked President Hans to study and propose possible avenues by the end of the first quarter of 2021. The chancellors of the five HBCUs provide in their joint letter compelling evidence for the benefits of permanently raising the cap to 25 percent for the HBCUs and detailed plans for ensuring compliance and assessment.

Assessment: The arguments presented by the HBCUs are compelling and data driven. An increase in the number of out-of-state students will allow continued growth and provide stability for those institutions. It is recommended that the Board adopt the proposed amendment that would permanently raise the cap to 25 percent for UNC System HBCUs. In addition, it is recommended that no penalty be assessed to any HBCU which exceeded this cap prior to fall 2020.

Action: This item requires a vote by the committee, with a vote by the full Board of Governors through the consent agenda at the next meeting.



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**HISTORICALLY BLACK COLLEGES
AND UNIVERSITIES**

ELIZABETH CITY STATE UNIVERSITY

FAYETTEVILLE STATE UNIVERSITY

NORTH CAROLINA AGRICULTURAL
AND TECHNICAL STATE UNIVERSITY

NORTH CAROLINA CENTRAL UNIVERSITY

WINSTON-SALEM STATE UNIVERSITY

February 3, 2021

President Peter Hans
University of North Carolina System
Box 2688
Chapel Hill, NC 27515

Dear President Hans:

Pursuant to our recent conversations regarding non-resident student enrollment caps for North Carolina's public historically black colleges and universities (HBCUs), we are petitioning your support for a request to the UNC Board of Governors to approve a change to *UNC Policy 700.1.3 Admissions* to grant our five campuses the authority to operate under a non-resident student cap of 25 percent, effective immediately. This action has the potential to strengthen the future of the UNC System's HBCUs, recruit new talent without forestalling any NC resident student access, and would greatly enhance the experience of all students at our universities.

The idea of providing flexibility to non-resident student (NRS) limits dates back to 2002, when the UNC Board of Governors first agreed to exempt non-resident engineering students from the calculations of non-resident freshmen at North Carolina A&T. Already a leading university in engineering disciplines, A&T's enrollment further blossomed under the heightened cap. The university overtook the national lead in graduation of African American engineers at the bachelor's degree level, and with further growth and development of additional masters and doctoral engineering programs, A&T subsequently moved into the national no. 1 position in graduation of Black undergraduate, masters and overall, aggregate engineering students. NRS, including international students, played critical roles in the university's enhanced success.

In 2014, A&T requested and was granted approval by the UNC Board of Governors to expand its NRS enrollment overall to 25 percent as a four-year pilot program, with the agreement that engineering NRS would not be counted against the overall cap.

Sought as part of A&T's strategic interest in improving student performance (including retention and graduation rates), enhancing success on licensure exams and job preparation, and growing enrollment by attracting top students (both in-state and NRS) to A&T's university's outstanding STEM, liberal arts and professional programs, the pilot was implemented in the university's entering class that fall. It was projected that A&T could make even larger contributions to the state's key workforce needs with a less constrained capacity to enroll NRS and that additional NRS enrollment would add strength to the university's academic programs, making them even more attractive for the in-state students who comprise the supermajority of the student body. The sum of these benefits would further positively impact the university's capacity for impact in North Carolina communities served by A&T.

It is no coincidence that A&T began a growth trend that fall that has continued unabated in every successive year, bucking national trends of enrollment contraction at many similar campuses. A&T also that fall became the largest historically black university in America with an enrollment of 10,725. The university held that status in every year since, including the current year, in which a headcount of 12,753 represents the fifth-consecutive year of record enrollment for A&T, moving it ever closer to the 2023 enrollment goal of 14,000 specified in its current strategic plan.

While Elizabeth City State University was also granted NRS-cap flexibility in 2002, as noted above, that flexibility was not continued. In the years that followed, ECSU experienced ups and downs in enrollment, and at one point, the North Carolina General Assembly considered closing the institution. After acknowledging the critical role ECSU plays in northeastern North Carolina, not just in education but also in economic impact, the legislature and UNC Board of Governors committed to keeping the institution open and supporting it as it builds the foundation for a sustainable future. Part of that commitment was the inclusion of ECSU in the NC Promise Tuition program, which launched in Fall 2018.

After experiencing an overall enrollment increase of 16 percent with 28 percent NRS in Fall 2018, ECSU received a two-year NRS cap waiver for its academic programs starting in 2019-20. As an NC Promise campus, ECSU has seen enrollment continue to grow with an 8 percent increase in Fall 2019 and a 13 percent increase in Fall 2020. NRS enrollment was a significant part of that growth, increasing 20 percent in 2019 and 25 percent in 2020. With its close proximity to Virginia, ECSU attracts significant numbers of NRS from the Tidewater region, just across the North Carolina-Virginia border. This clearly presents a further growth opportunity for ECSU.

ECSU projects this trend will continue for Fall 2021. In November 2020, ECSU already had an increase in admitted and confirmed NRS compared to November 2019. In combination with NC Promise, the higher cap has been instrumental setting ECSU on a more certain path to financial sustainability and economic impact.

Over the five years that the NRS cap has now been in place for A&T, the university has increased its production of degrees by 36.5 percent, conferring 2,422 degrees in 2019-20. The NRS who graduate from A&T not only do well academically, many remain in North Carolina and make significant contributions to its economy and communities. Between 2016 and 2019, the university produced 1,743 NRS graduates, nearly 32 percent of whom (553) were employed in North Carolina four quarters after graduation. That is greater than the overall System average during the same time span and higher than similar populations at some of the larger universities.

The examples of North Carolina A&T and ECSU, as well as the experience this academic year of NCCU, suggest a permanent heightened cap would have similar benefits for all HBCUs in the UNC System, as well as for the state and economy of North Carolina. Based on Fall 2020 enrollment data, there is evidence that there is strong student interest in both in-state and NRS at NCCU, as demonstrated by the 28 percent of the freshman class who are NRS. Neither the retention of NCCU students nor the 28 percent NRS negatively affected the ability of qualified in-state students to enroll at NCCU. NCCU offered and yielded 252 (79 percent) more scholarships for in-state students than NRS students for Fall 2020. If granted the authority to implement a 25 percent NRS cap, NCCU will ensure its enrollment and recruitment strategy adheres to that cap going forward. Given where NCCU is now, we petition the board to not levy a financial penalty for exceeding the 18 percent NRS cap this year. Attached you will find draft language for a policy revision.

It should be pointed out that each institution has demonstrated a commitment to continuing to increase diversity among its student body. Collectively, as of Fall 2019, African Americans comprised 72 percent of these five institutions' collective 34,008 enrollment. They were followed in representation by White students, at 11.6; Hispanic/Latino/a students, at 5.5 percent; students of two or more races, at 4.3 percent; non-resident alien or international students, at 1.5 percent; Asian Americans, at 1.2 percent; and Native American and Pacific Island students. That rich diversity creates a student body environment that better prepares all of our students for success in a world that grows ever more interconnected with each passing year and workplaces that will be distinguished by the wide and vibrant range of cultural, racial, ethnic and other differences.

Increasing the diversity of student populations is a goal shared by all institutions in the UNC System and beyond. We, of course, support this goal. However, as universities seek to increase the diversity of their students, many are heavily recruiting students from our traditional recruitment pools. Increasing our ability to recruit more NRS will enable us to expand our reach and further our own diversity goals.

We want to make clear that increasing enrollment of NRS at our campuses will not come at the expense of qualified North Carolina students. We remain firmly committed to our mission of serving the people of North Carolina. In examination of enrollment data for all UNC System

HBCUs, each campus has continued to admit qualified North Carolina residents per their respective admission standards and commits to continuing to do so. Further, each campus commits to maintain the requirement that the academic profile for admitted NRS in each freshman class will be higher than the academic profile of in-state students. Clearly, no in-state students are being disadvantaged by the enrollment of additional NRS, either at campuses where a higher cap exists or those operating under the traditional cap.

The markers of success described above notwithstanding, it is important to note two important guard rails relative to our higher NRS cap:

- As noted above, these campuses go to significant lengths to ensure that in-state students are not harmed by the recruitment and enrollment of NRS. One major way this is enforced is through higher admission requirements for NRS. This ensures that any non-North Carolina applicant admitted to the university has truly earned their spot by exceeding requirements for in-state applicants. We commit to maintaining higher admission requirements for NRS.
- Rigorously policing the new 25% cap, including accepting consequences under Board policy for violations, will ensure that enrollment is managed carefully, admitting with restraint. This is an area that requires significant attention and careful oversight and will require more in the future. We believe that is a small tradeoff for the positive contributions that NRS bring to our universities across many different measures.

In closing, it is our recommendation that the 25 percent NRS enrollment cap be extended in perpetuity to all HBCU campuses within the UNC System. The significant positive impact of the pilot programs to increase the NRS caps to 25 percent for both A&T and ECSU has included sustainable enrollment growth, increased financial stability, improved academic profiles of enrolled students, improved student performance in retention and graduation rates, enhanced success on licensure exams and preparation for the workforce, and strengthened competitiveness of academic programs. The combination of all those factors undoubtedly has improved both institutional brands, as well as rankings and recognition among peers, and suggests that these benefits may also be experienced at each UNC HBCU.

President Hans, our request to you is based on our desire to ensure that the UNC HBCU campuses are positioned to be more competitive and financially viable well into the future. We know that you and the Board of Governors share these goals and are committed to the success of our campuses. We are especially grateful for the Board's support which are manifested in actions such as the work of the HMSI Committee where the unique challenges and opportunities of our campuses can be highlighted.

We urge your strong support of this request and stand ready to provide answers to any questions you may have. Thank you.

Peter Hans

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Sincerely,



Harold L. Martin Sr., Ph.D.

Chancellor

North Carolina A&T State University



Karrie G. Dixon, Ed.D.

Chancellor

Elizabeth City State University



Peggy Valentine, Ed.D.

Interim Chancellor

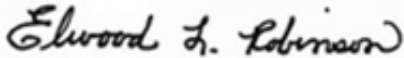
Fayetteville State University



Johnson Akinleye, Ph.D.

Chancellor

North Carolina Central University



Elwood Robinson, Ph.D.

Chancellor

Winston-Salem State University

CC: Chairwoman Venessa Harrison, Board of Trustees, North Carolina A&T State University

Chairwoman Jan King Robinson, Board of Trustees, Elizabeth City State University

Chairman Stuart Augustine, Board of Trustees, Fayetteville State University

Chairman Kevin M. Holloway, Board of Trustees, North Carolina Central University

Chairman Kelvin E. Farmer, Board of Trustees, Winston-Salem State University

Chapter 700 Admission, Matriculation, and Other Student Matters

700.1.3 Out-of-State Undergraduate Enrollment

To ensure that constituent institutions maintain a level of out-of-state undergraduate enrollment consistent with historical University policy and tradition, and one consistent with strong and balanced educational programs, it is recommended that the Board of Governors adopt this statement of policy:[\[1\]](#)

- a. Each constituent institution, except the North Carolina School of the Arts, shall take necessary steps to limit the proportion of out-of-state students in the entering freshman class to not more than 18 percent by the fall of 1988. In any instance in which a chancellor believes that his institution would suffer serious problems or hardships in reaching this limit within the time provided, he may petition the president and the Board of Governors for an extension of time to meet the 18 percent limit, which petition may be granted on an annual basis not to extend beyond the fall of 1990. The petition shall set forth the reason for the request, the steps taken by the institution in furtherance of the policy, and the progress made. The chancellor shall furnish such other information as may be requested by the president.
- b. The president shall monitor progress toward this goal, and shall make interim reports on fall 1986, and fall 1987, enrollments to the board.
- c. The board shall review this policy in 1988-89 and consider then whether amendments should be made or further measures adopted.
- d. It is the board's expectation that institutions will admit only academically well-qualified out-of-state students. In any year in which the average combined SAT score for out-of-state freshmen is below that for North Carolina freshmen, the president shall require a written report from the chancellor. The president will include in his interim reports to the board information on the average combined SAT scores for both groups of freshmen.
- e. Beginning with the fall of 1994, any constituent institution, except the North Carolina School of the Arts, that exceeds the 18 percent out-of-state freshman enrollment limitation prescribed in paragraph (a) above or the 25 percent out-of-state freshman enrollment limitation prescribed in paragraph (g) below for two consecutive fiscal years shall have its State operating budget reduced. This reduction shall be made in the second fiscal year in which the two consecutive fiscal year condition is violated; the reduction shall be made, on a non-recurring basis, immediately after the Board of Governors approves the annual enrollment report at its November meeting. The budget reduction shall be based on the number of out-of-state freshmen enrolled in excess of the 18 percent limitation and the established method used for calculating the operating requirements for regular term enrollment changes.
- f. The Board of Governors may, on the president's recommendation, authorize enrollment pilot programs that are exempt from the requirements of paragraphs (a) and (e) of this policy.
- g. Effective with the entering class of the fall semester 2021, the following institutions are authorized to enroll not more than 25 percent of non-resident students for tuition purposes in the entering full-time first-time (freshman) class: Elizabeth City State University, Fayetteville State University, North Carolina Agricultural & Technical State University, North Carolina Central University, and Winston-Salem State University. These institutions remain subject to all other requirements of this policy.

[\[1\]](#)The North Carolina School of Science and Mathematics may not admit or enroll out-of-state students. See G.S. 116-235.

AGENDA ITEM

A-5. Adaptive Courseware James Ptaszynski

Situation: This session will inform members on the subject of adaptive-learning courseware. Adaptive-learning courseware has capabilities and potential benefits to the UNC System and student success during the pandemic and beyond. Discussion will summarize the creation and deployment of six adaptive learning courses across seven universities with nearly 2,000 students.

Background: Following the introduction of the personal computers in the 1980s, there has been an ongoing expectation that technology would create widespread changes to processes in higher education. While technology has significantly impacted administrative functions, it has been less impactful in supporting core teaching and learning activities. One growing exception is adaptive-learning courseware. The courseware offers the opportunity to enhance, augment, extend, and, in some cases, even replace traditional teaching practices. As a result, faculty can better understand student academic struggles and successes and explore new avenues to intervene and improve student success.

Assessment: Using CARES Act funding, the System Office, in collaboration with seven UNC System institutions, created six adaptive-learning courses. This presentation illustrates the benefits of using collaboratively and faculty-led adaptive courseware across the UNC System.

Action: This item is for information only.

Memorandum

To: Committee on Educational Planning, Policies, and Programs

From: James Garner Ptaszynski, Ph.D., and Katherine Saul, Ph.D.

Date: February 17, 2021

Subject: Digital Learning Update on Adaptive Courseware

Over the past 35 years, technology has dramatically impacted higher education. Technological advances have significantly changed administrative and support functions but have had less effect in core teaching and learning activities. While technology can easily automate many administrative functions, (e.g., course registration), impactful implementation is much more difficult to achieve in academic practices as they require unique, and in many cases personalized, faculty-to-student interactions.

One technology-enabled solution that holds academic promise is adaptive-learning courseware. “Courseware” was initially created in the 1990s to support supplemental activities for use outside the classroom. Often, these were simply computer-automated practice tests that worked in a one-size-fits-all linear fashion. These early instantiations of courseware had little or no adaptive properties, provided few insights, (i.e., analytics), on student learning, and did not provide for personalized or adaptive learning paths.

Fast-forward to 2021 and courseware has increasingly become sophisticated, enlightening, engaging, and adaptive. This courseware offers the opportunity to enhance, augment, extend, and, in some cases, even replace traditional teaching practices. Faculty are enabled to better understand areas where students succeed or struggle and the experience offers new possibilities for faculty to intervene and actively improve student success. Not just for remote learning, adaptive-learning courseware can be used to support the traditional physical classroom, hybrid education models, and online learning.

Using CARES Act funding, the UNC System Office, in collaboration with seven UNC System institutions (Appalachian State University, East Carolina University, North Carolina A&T State University, North Carolina State University, University of North Carolina at Charlotte, The University of North Carolina at Greensboro, and The University of North Carolina at Pembroke) created six adaptive learning courses. These included three high-enrollment engineering courses (Statics, Dynamics, and Physics) and three high-enrollment chemistry courses (Chemistry I, Chemistry II, and Organic Chemistry). These courses are being tested this semester with nearly 2,000 students. Specific demonstrations and examples will be provided from one of the engineering adaptive-learning courses at NC State.



ADAPTIVE LEARNING COURSEWARE

James Garner Ptaszynski, Ph.D.

Katherine Saul, Ph.D.

Committee on Educational Planning, Policies, and Programs

February 2021

Enabling student success

- Are students learning?
- Are they progressing adequately?
- Where are they struggling and why?
- Can we personalize teaching and learning?
- How can we enable faculty to focus on higher order teaching?



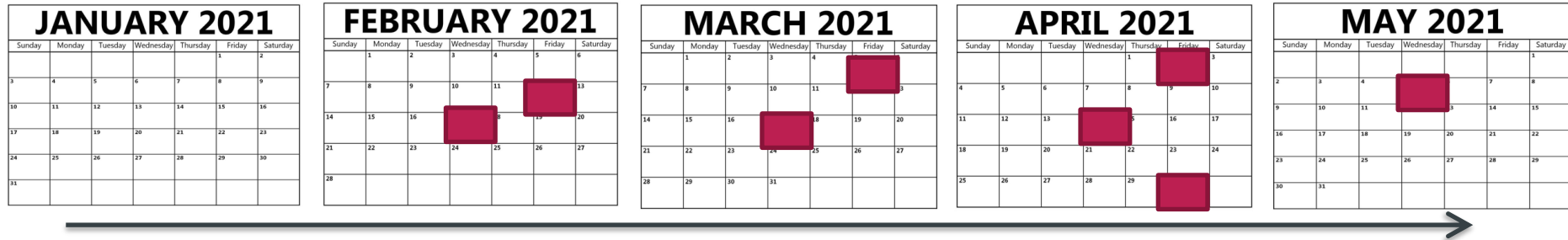
These problems exist in all types of learning





What is adaptive learning?

traditional course



synchronous
lectures

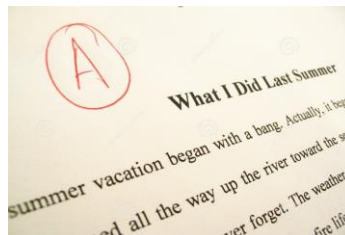


textbook



projects

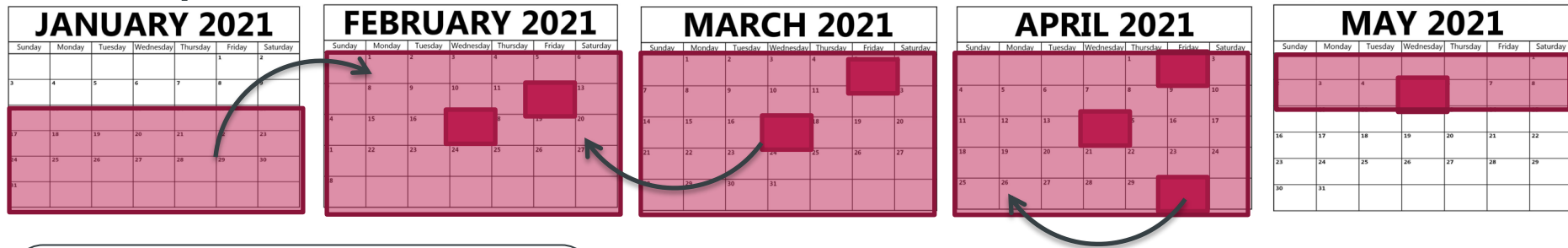
- Periodic information for faculty
- One track for students
- Static materials
- Dimensions of student success hard to tease apart



- How much time did they dedicate?
- Do they understand concepts
- How motivated are they?

What is adaptive learning?

adaptive course



synchronous
lectures



textbook



projects



adaptive
learning

- Continuous information for faculty
- Student path is personalized
- Adaptive materials
- Dimensions of student success clearly separated

Progress



Mastery



Attitude



Adaptive learning = adaptive teaching

The image displays the NCSU adaptive learning interface, which includes a learning map and a detailed question view.

Learning Map: A sequence of topics is shown: Point Forces (26 / 27), Vectors in Statics (25 / 27), More Point Forces (22 / 27), Free-Body Diagrams for a Particle in Two..., and Equilibrium for a Particle in Two Dimensions (21 / 27). The 'Vectors in Statics' topic is highlighted with a red dashed box.

Question Details Window: This window shows the 'Questions' tab for 'Vectors in Statics'. It includes a table of question performance data.

Type	Correct	Incorrect	Min time	Max time	Avg time
Enter answer	90	52	0 secs	1 min	
Enter answer	127	10	0 secs	5 mins	
Enter answer	126	10	0 secs	8 mins	
Enter answer	125	11	0 secs	3 mins	
Enter answer	123	12	0 secs	1 min	

The question details window also shows a diagram of a particle in equilibrium. The diagram includes a coordinate system with x and y axes, a force vector L of magnitude 14 ft, and angles θ and α .

Question Text: Which law (sines or cosines) would you apply first here to find L ?

Correct answer: cosines

Student answer: cosines

Score: 0

Adaptive learning = adaptive teaching

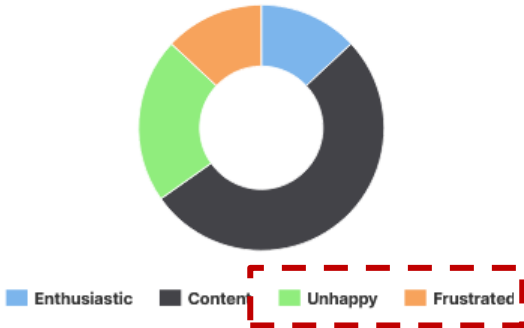
Roles / Courses / Statics - Howard / MAE 206 Spring 2021 Engineering Statics / Equilibrium for a Particle in Two Dimensions

Objective
< **Equilibrium for a Particle in Two Dimensions**
Due date: 2/1/2021

Need To Know Learning Map Students Analytics

5 students

Realizeit emotional framework v1.1



■ Enthusiastic ■ Content ■ Unhappy ■ Frustrated

it NC STATE

Roles / Courses / Statics - Howard / MAE 206 Spring 2021 Engineering Statics / Equilibrium for a Particle in Two Dimensions

Objective
< **Equilibrium for a Particle in Two Dimensions**
Due date: 2/1/2021

Need To Know Learning Map Students Analytics

✓ Weaker students (10)

Ranking Last work Time spent Est Time left Progress Mastery Composite score

Send message

Objective: Capstone Questions Mod 1

To: Multiple students

Hello,

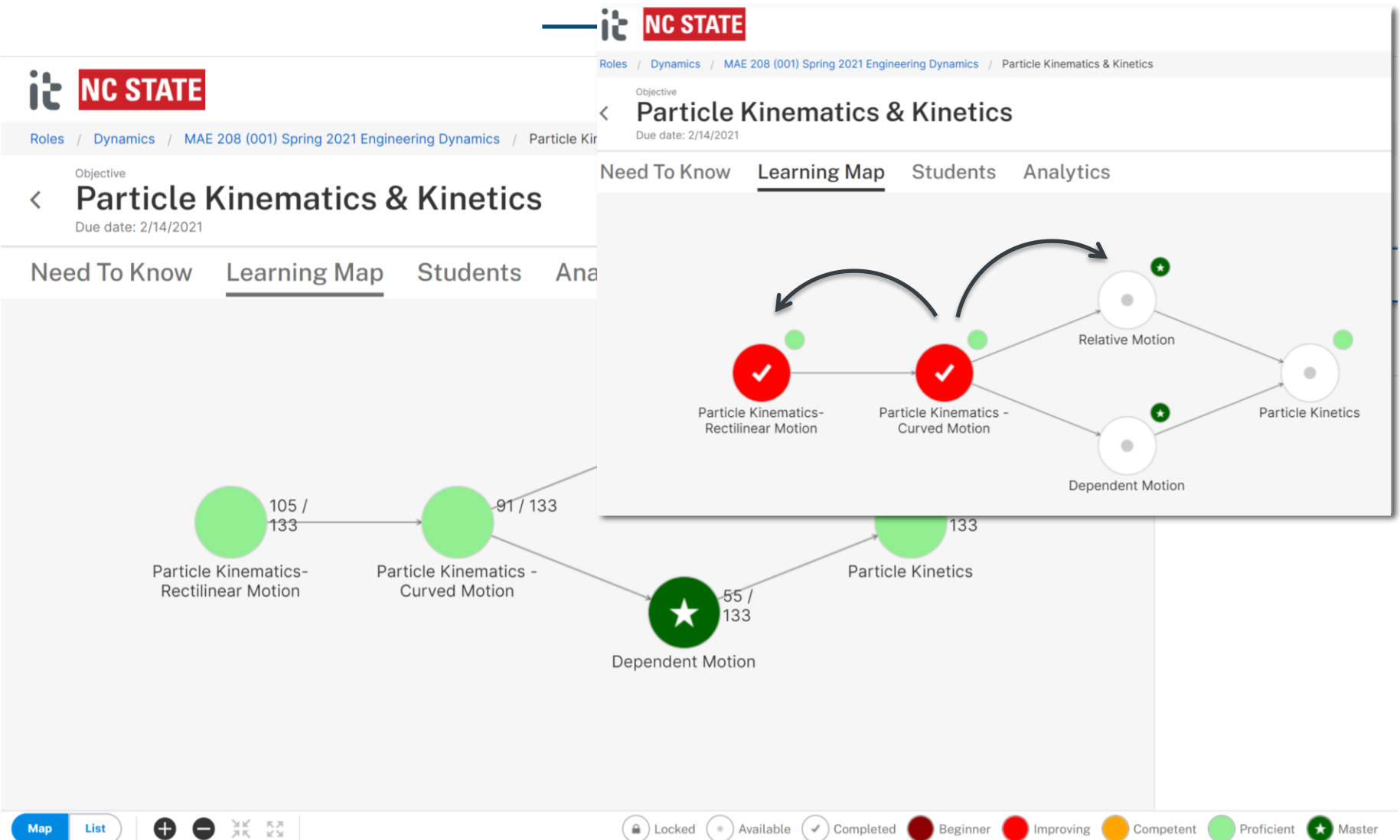
I noticed you are still working to improve your mastery score for the unit due Sunday.
I'd like to visit with you in office hours so that we can go over the concepts you are still practicing.
I also suggest based on your practice that you review the vector section in the prerequisite material.

Best,
KS

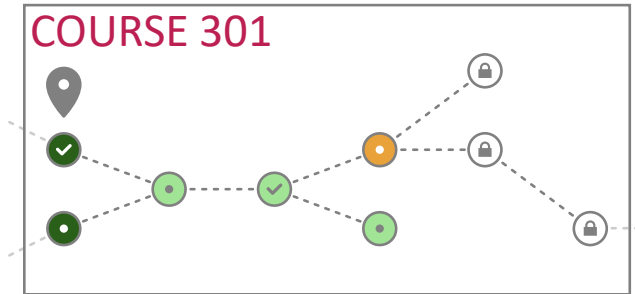
☒ I want a response **Send**

Student	Last work	Time spent	Est Time left	Progress	Mastery	Composite score
[Student]	Feb 1	11 hrs 51 mins	6/6	Knowledge covered	Improving: 69%	51%
[Student]	Feb 1	9 hrs 45 mins	6/6	Knowledge covered	Improving: 67%	38%
[Student]	Jan 31	2 hrs 37 mins	6/6	Knowledge covered	Beginner: 59%	36%

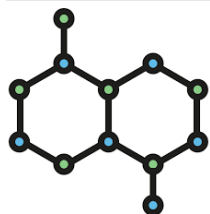
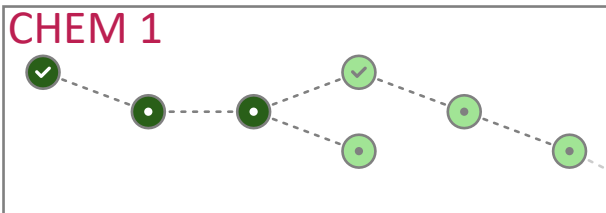
Personalized experience for students



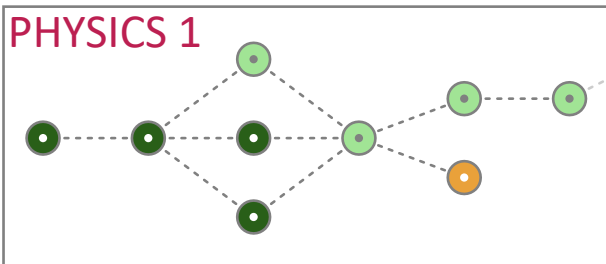
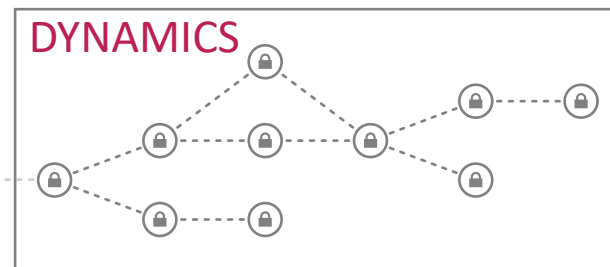
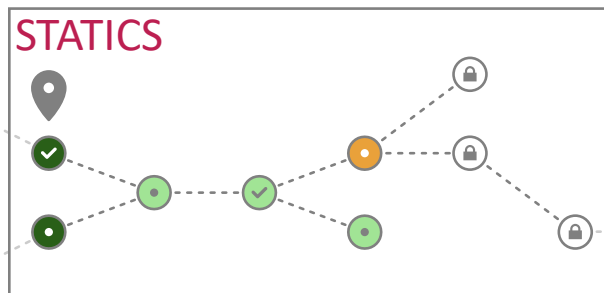
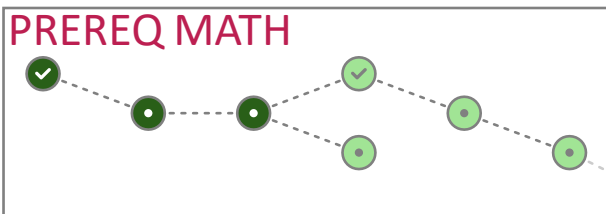
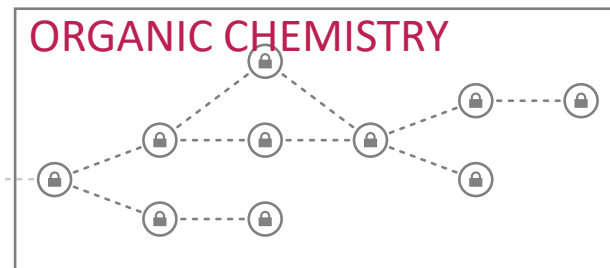
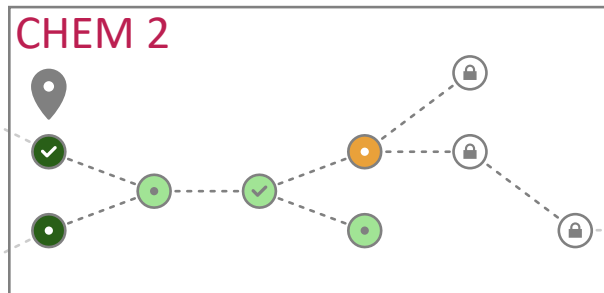
Spines of connected courses



Spines of connected courses

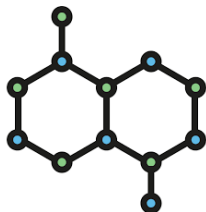


CHEMISTRY
SEQUENCE

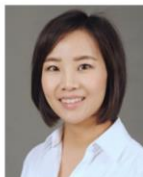


ENGINEERING
SEQUENCE

Development teams



Maria Gallardo-Williams, Ph.D.
Teaching Associate Processor
Organic Chemistry
NCSU
Organic Chemistry



Michelle Hu, Ph.D.
Lecturer
Chemistry
UNC Greensboro
Chemistry II



Jordan C. Poler, Ph.D.
Professor
Chemistry
UNC Charlotte
Chemistry I



Kate Saul, Ph.D.
Associate Processor
Mechanical and Aerospace Engineering
NCSU
Dynamics



Anna Howard, Ph.D.
Associate Processor
Mechanical and Aerospace Engineering
NCSU
Statics



Zodiac Webster, Ph.D.
Teaching Assistant Processor
Physics
NCSU
Physics



THE CENTER FOR TEACHING AND LEARNING



Garvey Pike



Heather McCullough



Bruce Richards



Kiran Budhrani



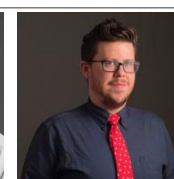
Distance Education and Learning Technology Applications



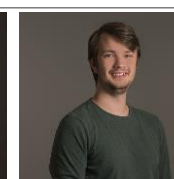
David Howard



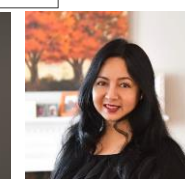
Daniel Davis



Chris Willis

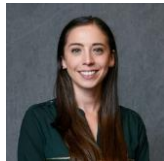
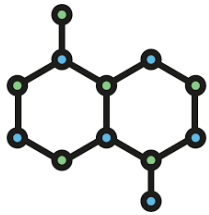


David Treadwell



Jakia Salam

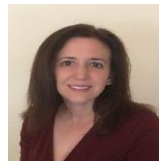
Faculty/university partners reaching >1900 students this semester alone



Kirsten Daykin



Lauren Woods



Jennifer Cecile



Chris Venters



Vernal Alford



Jonathan Beaman



Meredith Storms



Daniel Christen



Chante Muller



Amanda Howell



Zack Lewis



Matt Davies



Brian Sylcott



Thaddeus Paulsel



Jenny Kant



Joe Foeller



Paul Akangah

Enabling student success

- ✓ Applicable to all modes of teaching & learning
- ✓ Are students learning?
- ✓ Are they progressing adequately?
- ✓ Where are they struggling and why?
- ✓ Can we personalize teaching and learning?
- ✓ How can we enable faculty to focus on higher order teaching?



Unhappy	6/6 Knowledge covered	Competent: 79%
Unhappy	5/6 Knowledge covered	Master: 92%
Unhappy	6/6 Knowledge covered	Proficient: 87%



THANK YOU

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QUESTIONS?

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AGENDA ITEM

A-6. Career and College Promise and Cooperative Innovation High Schools Report..... Bethany Meighen

- Situation:** The Career and College Promise and Evaluation of Cooperative Innovation High School Programs (CCP/CIHS) Report responds to the requirements of the legislation enacted in G.S. 115C-238.55, which establishes that “the State Board of Education and the governing Boards shall evaluate the success of students in cooperative innovative high schools approved under this Part.” The CCP/CIHS Report also responds to the requirements of the legislation enacted in G.S. 115D-5(x), which establishes that “in addition to the evaluation of cooperative innovative high schools by the State Board of Education pursuant to G.S. 115C-238.55, the State Board of Community Colleges, in conjunction with the State Board of Education (SBE), and the Board of Governors of The University of North Carolina, shall evaluate the success of students participating in the Career and College Promise Program, including the College Transfer pathway and the Career and Technical Education pathway.”
- Background:** The State Board of Community Colleges, in conjunction with the SBE, and the Board of Governors shall jointly report by March 15 of each year to the Joint Legislative Education Oversight Committee. The CCP/CIHS Report is going to the SBE in February for discussion and then March 4 for approval. North Carolina Board of Instruction (NC DPI) staff do not anticipate any changes in the report, however, if the SBE or either of the boards would like changes, particularly based on public feedback, edits can be made.
- Assessment:** The CCP/CIHS Report provided the following information for the 2019-20 academic year of students who participated in and graduated from Cooperative Innovative High Schools: high school retention rates, high school completion rates, high school dropout rates, certification and associate degree completion, admission to four-year institutions, post-graduation employment in career or study-related fields, and employer satisfaction of employees. The same metrics were addressed for students who participated in the Career and College Promise Program (CCP). For fall 2020, University of North Carolina System institutions admitted 79,257 students from NC Public High Schools, including Charters. Based on preliminary results, this is an increase of six percent (4,148 students), from fall 2019. UNC System institutions accepted 7,409 applications from CIHS students, an increase of 1,228 students from the previous school year.
- Action:** This item is for information only.