

Public Schools of North Carolina
State Board of Education
Department of Public Instruction

PROGRESS ON THE IMPLEMENTATION OF THE CAREER AND COLLEGE READY GRADUATES PROGRAM

A Report to the:
Joint Legislative Education Oversight Committee

Submitted by The State Board of Community Colleges
and the State Board of Education

Section 10.13 of S.L. 2015-241

March 15, 2018

BACKGROUND

Section 10.13 of S.L. 2015-241, Career and College Ready Graduates, requires the State Board of Community Colleges (SBCC), in consultation with the State Board of Education (SBE), to develop a program for implementation beginning in the 2016-17 school year that introduces the college developmental mathematics and developmental reading and English curriculums in the high school senior year and provides opportunities for college remediation for students prior to high school graduation through cooperation with community college partners. Implementation of select model partnerships began in the 2016/17 academic year with a scaled implementation planned for subsequent years.¹

This program will be mandatory for high school students in their senior year who have not met benchmarks established by the SBCC in their junior year. High schools are required to use the curriculum approved by the SBCC, in consultation with the SBE. The SBCC is also required to determine the appropriate measure of successful completion to ensure students are prepared for coursework at a North Carolina community college. The training will be prepared and delivered by the professional development sub-committee of the Career and College Ready Graduate Alignment Partnership (CCRGAP) committee. The courses will be delivered by high school faculty after completing training requirements. The NC Community College System (NCCCS) will provide oversight for the program.

In working to design the program, the NCCCS and the Department of Public Instruction (DPI) are partnering to support the goal of students successfully graduating from public high schools who are career and college ready. In doing so, both the NCCCS and DPI are engaged in developing the best additional strategies to target specific academic deficiencies.

As a first step, the NCCCS convened a community college stakeholder team to lead the development of strategies to design and implement the career and college ready graduate program. The team is composed of mathematics faculty; English/reading faculty; and, statewide association representatives.²

The team investigated programs in North Carolina as well as other states and identified four tenets essential to support a successful program:

1. Program development must be data-informed.
2. One strategy may not sufficiently address the state-wide need.
3. The program should build on policies already in place as well as possible partnerships with work already occurring within the State.
4. Students who successfully complete the program should be career and college ready, including all public higher education in North Carolina.

¹ The NCCCS and the DPI are currently seeking an extension of Phase II to allow for fall statewide implementation in 2020/21, to fully align with proposed developmental education changes occurring at the NC community colleges and to have sufficient data from Phase I and Phase II to accurately inform decisions on eligibility criteria.

² NC Association of Community College Presidents; NC Student Development Administrators; NC College English Instructors; NC Community College Association of Distance Learners; NC Association of Community College Instructional Administrators; NC Association of Development Educators; and, NC Mathematics Association of Two-Year Colleges

Wake Technical Community College was designated as the Lead College, via a competitive RFP process, to assist with coordination of community college/high school partnerships and organizing regional professional development.

2016-17 Phase I Models

Measures for Determining Student Participation in Remedial Coursework. The ACT benchmark in math and English, with slight variance in conjunction with high school GPA, was the initial factor in determining whether a student is required to enroll in remedial coursework during the senior year, for all but one of the Phase I models. Students who meet these standards are exempt from the career and college ready graduate coursework.

ACT Subject-Area Test	ACT Benchmark	Exempts a student from:
English	18	Remediation in English
Reading	22	Remediation in English
Mathematics	22	Remediation in math
Unweighted high school GPA	2.8+	Remediation in math and English

Students who did not meet the above benchmarks were required to enroll in remedial coursework in their senior year, in addition to their other courses.³

The seven college/high school partnership models for the 2016-17 academic year all volunteered. The community college and respective high school(s) have worked diligently to create the best program possible for their students. Many of the Phase I models utilized the Southern Regional Education Board (SREB) Essential of College Mathematics (ECM) course. The SREB Math Ready is a course taught by several secondary schools and approved for minimum course requirements by the UNC system as well as a fourth math for NC Community Colleges Multiple Measures for Placement. The course is designed to support learning of math concepts to enable students to be prepared for college coursework.

1. Asheville-Buncombe Community College partnering with:

- Asheville City Schools: Targeted math. Embedded National Repository of Online Courses (NROC) EdReady within Essentials of College Math. The class contained both Career and College Ready Graduate students and those who were not; everyone completed the remediation work and it counted towards the grade in the ECM class. The criteria for remediation were students that had an unweighted high school GPA below 2.7. Post remediation, the NC Diagnostic and Placement test (NC DAP) was used to determine success or failure. The course was the traditional 18-week semester long course.

³ During the 2016/17 AY CCRG was not mandatory, therefore not all students falling below the eligibility criteria were required to enroll in remediation during their senior year.

- Buncombe County: Targeted math. Embedding the National Repository of Online Courses (NROC)'s EdReady within Essentials of College Math (ECM). The class contained students who are both Career and College Ready and those who were not; everyone completed the remediation work and counted towards the grade in the ECM class. The criteria for remediation were students that had an unweighted high school GPA below 2.7. Post remediation, the NC DAP was used to determine success or failure. The course was the traditional 18-week semester long course.
- Madison County: Targeted math. They incorporated the remediation as part of their smart lunch and only students that needed remediation were targeted.

2. Alamance Community College partnered with:

- Southern Alamance High School: Targeted math and English. The remediation was a semester-long course. Southern Alamance High School provided students with a first block and third block where students could complete their math and/or English remediation.

Math. Used the NROC EdReady as a stand-alone course. The criteria for remediation were ACT scores: reading below 18, math below 22, or an unweighted high school GPA below 2.6. Students took an in-class diagnostic test in EdReady, that aligns with the NC DAP Developmental Math Modules (DMA). The results of the diagnostic test created personalized assignments for each student. For students to be determined as mastering the content, they needed to master one of the paper tests that are administered to Alamance Community College developmental students. Students needed to complete them in order, as students in college complete them. The stand-alone class was pass/fail. The student was required to complete all the coursework that was not mastered during the assessment. Students were assessed (proctored) on each individual DMA needed. Students who did not complete all their modules at the end of the semester were able to retake the placement test. This allowed them to test out of any modules they currently had not completed during their senior year.

English: Used NROC's Developmental English course that had been imported into a Moodle Learning Management System (LMS) course. The student was required to complete all the coursework that was not mastered during the assessment. Students were assessed (proctored) on each individual (Developmental Reading and English)DRE needed.

3. Brunswick Community College partnered with:

- Brunswick County Schools: Targeted reading and English. Spring 2017 Brunswick used a new elective course. It was a Moodle Learning Management System course built from NROCs Developmental English course. The first semester of a students' senior year the English IV course was taken and the second semester was the remediation course. The criteria for needing remediation was an ACT score less than 18 English, less than 22 on reading, or an unweighted high school GPA of less than 2.7. Proficiency was determined by a specific grade during year one of implementation and/or the results of the NC DAP. A

student took the NC DAP at the beginning and end of the remediation course for data collection purposes. If a student demonstrated mastery on the NC DAP this was considered valid at Brunswick CC (and at any of the 58 community colleges). The first year of the model involved one classroom in one high school. Participation was optional for year one. The counselors presented the remediation class as part of the student's course plan for the spring to increase the likelihood that the student would take the course. The actual grade for the class was pass/fail. Brunswick CC faculty met with the course instructor and the school's English-Language Arts coach to create their in-depth plan for pacing, scheduling of class sessions, criteria for assessment, etc. A major challenge was locating computers/Chromebooks for the classroom.

4. Central Piedmont Community College partnered with:

- Charlotte Mecklenburg Schools – Harding HS, Myers Park HS, Olympic (TEAM) HS, Vance HS, and West Charlotte HS. Targeted math. CCCC embedded EdReady into Advanced Models and Functions (AFM). All students in the AFM class were required to participate in the remediation. The CMS high schools have varying needs therefore additional math courses were being considered. The model design is aimed at embedding remediation into existing courses to minimize disruptions to the learning environment. The EdReady content is aligned as a support mechanism for the most essential prerequisite topics of each course. The EdReady content is not explicitly aligned to the Developmental Mathematics modules (DMAs) however there is a strong correlation between the EdReady content and the DMA learning objectives. The model does not currently include a crosswalk to the DMAs. The criteria for determining students that were not Career and College Ready were those students that scored less than 18 on the ACT math.

Students were given an initial diagnostic assessment followed by a personalized study plan that is aligned with the high school curriculum. The students were required to illustrate mastery of the prerequisite/developmental topics in EdReady and earn a C or higher in the AFM class.

5. Davidson County Community College partnered with:

- Lexington City Schools: targeted math and reading/English. Lexington City Schools offered two stand-alone, 9-week math program and 9-week reading program. The 9-week remediation courses were offered the first semester of a student's senior year and the second semester contained the fourth math course and/or English course. The criteria for remediation was an ACT score below 18 on the English and a score below 21 on the math, or an unweighted high school GPA of less than 2.7.

Math: The remediation course utilized NROC's EdReady that has been aligned with the Developmental Math Modules. There were mastery assignments throughout the course and not a high stakes assessment at the end of the course. A crosswalk was developed between the NROC EdReady course and the Developmental Math modules (DMA)s. The class was pass/fail and students received a pass based on effort, success, and successful completion of an appropriate number of modules. To further explain this process, students come to this math course with varied abilities and backgrounds. If students work, make progress, and complete the number of modules they were able to complete in the time allowed, then they receive a P, as well as non-course credit (at the community college) for the modules they mastered. We must remember

that many of these students are seeking a technical certificate, diploma or associate's degree. Some of these programs may not require all the DMA modules. Successful completion of any modules will decrease the time necessary at Davidson County CC to complete a program and decrease the classroom time necessary to earn a family sustaining wage. When a student enrolls at Davidson County CC individual DMA credit is awarded for modules in which the student has demonstrated mastery.

English: In English/Reading, students worked through the NROC English materials to improve their reading, comprehension, and writing skills. If they mastered the skills for DRE096, DRE097, and/or DRE098, students received a P and were awarded non-course credit for the remedial college courses based on their own individual skill attainment. During the first model year, DCCC deemed success as the completion of as many modules as possible to ensure each student's understanding and mastery of the skills in each module.

6. Pitt Community College partnered with:

- JH Rose High School & South Central High School: Pitt CC offered a "bundle" of courses to students that were not career and college ready, as deemed by their high school teachers and the NC DAP. The bundle included a professional development course, a research course, a college study skills course and developmental math and developmental English course. The bundle was taught each semester, Monday through Friday for a 90-minute block. Upon completion students retook the NC DAP. The results from the NC DAP were used for placement at Pitt CC. Pitt CC is not currently using the state-wide English or math course but will begin using these courses in spring 2018.

7. Randolph Community College partnered with:

- Asheboro High School: targeted math. Randolph CC and Asheboro High School embedded Developmental Math Modules (DMA) material within two SREB courses. They did not use a technology based intervention. Students took the NC DAP and this was used as a pre-and-post assessment. There was one grade for the SREB course that was inclusive of the remediation work. The criteria for determining career and college ready were all students that made a C or D in Math 3 (or were on the path to do so when registration took place). Those students were placed in Essentials for College Mathematics

State-wide courses

The math sub-committee of the CCRGAP task force has created a NROC EdReady math course. The math sub-committee incorporated input from community college faculty, high school teachers, the DPI, and LEAs wherever possible. This course was sent to all members of the CCRGAP taskforce (over 90) for review. The course has been closely aligned with the Developmental Math Modules offered at the 58 community colleges, is mastery based, and allows a student to earn "credit"⁴ for these modules at the

⁴ Credit earned for developmental education courses does not count toward graduation.

community college. Although successful completion of the entire course is the goal we realize that might not be obtainable for all students. This newly created course allows for a reduced developmental education footprint, if not completely mastered. The EdReady math course resides in the cloud. Students were given a URL that has been customized for their participating college.

The English sub-committee of the CCRGAP task force has created an English/reading course. The English sub-committee incorporated input from community college faculty, high school teachers, the DPI, and LEAs wherever possible. This course was sent to all members of the CCRGAP taskforce (over 90) for review. The course has been closely aligned with the Developmental English courses offered at the 58 community colleges and allows a student to earn “credit” for these courses at the community college. Although successful completion of the entire course is the goal we realize that might not be obtainable for all students. This newly created course will allow for a reduced developmental education footprint, if not completely mastered. The English course resides in the Virtual Learning Community (VLC). Every participating high school senior was assigned a community college email address to access the course.

It is important to note that both the state-wide math and English course rely heavily upon technology. Although a paper/pencil option was made available, the courses were not created with that approach at the forefront. Internet, bandwidth, and accessibility to computers within the high schools is of utmost concern.

The above-referenced curriculum discussion will allow community college/high school partnerships to utilize one of the existing courses, or to establish frameworks for new courses, that will align with NCDPI graduation standards as well as satisfy college-level course prerequisite requirements.

Assessment to Determine Successful Completion

After completing remedial coursework, students were assessed to determine career and college readiness. In some of the models this assessment occurred at the end of the remedial intervention in the student’s senior year. Some math models utilized a mastery-based approach whereby students were assessed at multiple points during the course. To progress, mastery was required on preceding modules. Students could receive “credit” for individual developmental math modules at their respective community college.

Grading of the final English assessment utilized a rubric. The score on the final assessment determined whether a student successfully completed all the English remediation or only received credit for one or two of the developmental English courses. Students could receive “credit” for individual developmental English courses at their respective community college.

Phase I Models – At a Glance

	AB-Tech	Alamance	Brunswick
Criteria for determining career and college ready	Unweighted HS GPA < 2.6 or ACT reading < 18 Math < 21	ACT reading < 18 Math < 22 or unweighted HS GPA < 2.6	ACT reading < 18 Math < 21 or unweighted HS GPA < 2.7
Number of partnering high schools	8	1	1
Remediation required of students not CCR?	Yes	No	Optional during year one.
Targeted subject	Math	Math and English	English
Length of course	Asheville City Schools and Buncombe County: 18-week semester Madison County: Offered during “Smart” lunch.	Semester	Semester
Embedding or Stand-alone?	Embedded within the SREB ECM course	Stand-alone course	Stand-alone “mandatory elective”
Using State-wide EdReady math course?	No, not yet.	No, not yet.	N/A
Using state-wide NROC English course?	N/A	Yes	Yes
Criteria for determining success	NC DAP	Math – Mastery of a paper/pencil test identical to one given to ACC students.	Class grade and/or NC DAP

	Central Piedmont	Davidson	Pitt	Randolph
Criteria for determining career and college ready	ACT math < 18 and registered for the AFM class	ACT reading < 18 Math < 21 or unweighted HS GPA < 2.7	Students that identify as planning on attending Pitt CC and identified by faculty as not career and college ready	A student that receives a grade below a B in Math III
Number of partnering high schools	5	1	1	1
Remediation required of students not CCR?	Yes, any student registered for AFM will be required to participate in the remediation	Yes	No	Yes
Targeted subject	Math	Math and English	Math and English	Math
Length of course	Semester	9-weeks for math and 9-weeks for English	Year-long	Semester
Embedding or Stand-alone?	Embedded within Advanced Functions and Models	Stand-alone	Embedded within a CCP cluster	Embedded within the ECM course
Using State-wide EdReady math course?	No	Yes	Spring 2017 – No Fall 2017 - Yes	No – using paper/pencil approach
Using state-wide NROC English course?	N/A	Yes	Spring 2017 – No Fall 2017 - Yes	N/A

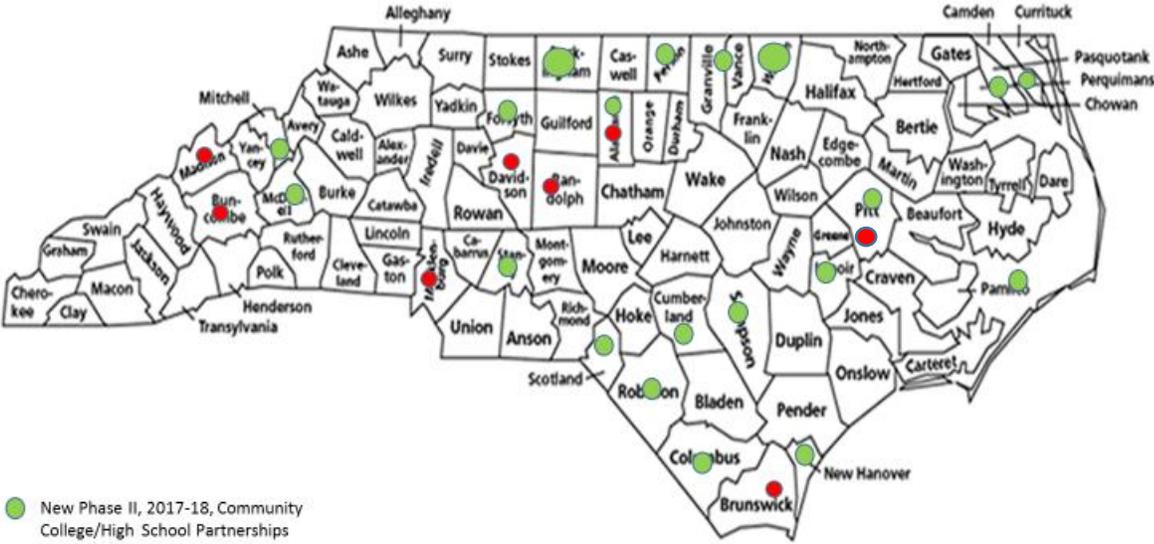
Phase I Partnerships 2016-17 AY



● 2016-2017 Community College/High School Partnerships



Phase I & Phase II Partnerships 2017-18 AY



● New Phase II, 2017-18, Community College/High School Partnerships

Phase II Partnerships

Community College	High School(s)
AB-Tech	Asheville HS, A.C. Reynolds HS, Charles D. Owen HS, T.C. Roberson HS, Madison HS
Alamance CC	Graham High, Hugh M. Cummings, Walter M. Williams, Southern Alamance HS
Brunswick CC	Brunswick County HS
Cape Fear CC	Still under discussion
Central Piedmont CC	Harding HS, Myers Park HS, Andrews Kell HS, Butler HS, Independence HS, Mallard Creek HS, North Mecklenberg HS, Northwest School of the Arts, Charlotte Engineering Early College @UNCC, Olympic Renaissance, Vance HS, West Charlotte HS, Hopewell HS
College of the Albemarle	John A. Holmes HS
Davidson County CC	Lexington City Schools
Fayetteville Technical CC	E.E. Smith HS
Forsyth Technical CC	North Stokes HS, West Stokes HS, South Stokes HS
Lenoir CC	Kinston High, North Lenoir HS, South Lenoir HS, Lenoir Early College
Mayland CC	Mountain Heritage HS
McDowell Technical CC	McDowell HS
Pamlico CC	Pamlico County HS
Piedmont CC	Person HS
Pitt CC	JH Rose HS, South Central HS

Randolph CC	Asheboro HS
Richmond CC	Scotland HS
Robeson CC	Purnell Swett HS, South Robeson HS
Rockingham CC	Morehead HS, Dalton L. McMichael HS
Sampson CC	Hobpton, Lakewood, Midway, Union, Sampson Early College
Southeastern CC	Whiteville HS, Columbus Career and College Academy (seated), Columbus Career and College Academy (online)
Stanly CC	North Stanly HS
Vance-Granville CC	Warren County HS

Evaluation of Models & Narrowing Eligibility Criteria

Phase I, "n" size of 588, produced the following results:

- The stand-alone, elective math and English classes had the highest success rates. One high school CCRG math class had 87% of the students complete five developmental math modules. (Most programs at the community college do not require beyond the fifth module, STEM being the exception). 95% of students in the CCRG English class completed the entire CCRG course and will be ready for ENG-111 (Writing and Inquiry).
- Students with unweighted high school GPAs below 2.2 were not as successful as students with GPAs above 2.2.

Phase II modifications

Phase II consists of 23 college/high school partnerships. We have sought external funding and as a result ten of the NC community colleges will receive a small amount of Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) funds.

- Phase II - The criteria for determining career and college ready for English is an unweighted HS GPA 2.2-2.799 or ACT English 18+ or ACT Reading 22+ or SAT Evidence Based Reading 480. The criteria for determining career and college ready for math is unweighted HS GPA 2.2-2.799 or ACT 22+ or SAT 530.
- During the summer 2017, twelve faculty met for 2 ½ days to create an enhanced version of the statewide English course. It has been delivered to the UNC-General Administration (UNC-GA) for review. The goal is for this new course to be accepted at NC's 16 public universities as part of the

minimum course requirements (MCR). This acceptance will hopefully allow the high schools to offer the course as an alternative to the existing senior year English class. This same course will be presented to the State Board of Community Colleges and the State Board of Education, seeking approval for a fourth English class for high school graduation.

- Fall 2017, 14 math faculty met to begin developing an enhanced version of the statewide math course. It will be delivered to UNC-GA for review. The goal is for this new course to be accepted at NC's 16 public universities as part of the minimum course requirements. This acceptance will hopefully allow the high schools to offer the course as an alternative to the existing fourth year math classes. This same course will be presented to the State Board of Community Colleges and the State Board of Education, seeking approval for a fourth math class for high school graduation.

Communication/Professional Development/Data Analysis

During the fall 2017, the NCCCS held four one-day summits aligned with the DPI Service areas. This allowed Local Education Agencies, high schools, teachers, counselors, and community colleges to learn detailed information about the CCRG initiative and hear firsthand from Phase I partnerships. More than 700 faculty and staff attended.

One result of these summits was that additional college/high school partnerships now have the knowledge needed to begin their planning for future implementation.

On-going professional development is planned for the next three years. The PD committee will also establish an evaluation plan that will position colleges and school districts to review the success levels of student completers of the adopted courses.

The NCCCS in collaboration with the DPI is establishing methods for determining the efficacy of the Career and College Ready Graduates initiative.

Faculty, student services, PD, and research teams will continue to meet in 2018 to finalize all the details, policies, and procedures associated with the CCRGAP full implementation and its connection to the new developmental model for the NC community colleges.⁵

Effective Implementation At a glance- timeline

⁵ NC is currently redesigning its Developmental Education. It is moving toward a corequisite model of remediation and pending final approval from our presidents, no longer requiring a one-time high stakes placement test.

2018 Spring

Complete Phase II to inform final development and implementation.

Gain course approvals from UNC-GA to meet MCR.

Grow CC/LEA partnerships to expand opportunities for student participation.

2018-2019

Phase II data quantitative and qualitative review and analysis to inform future implementation

Finalize content delivery. Finalize student eligibility.

Develop data sharing agreements.

Develop and deliver professional development.

Grow CC/LEA partnerships to expand opportunities for student participation.

Develop policies and obtain approval from Governing Boards.

2019-2020

Continued PD.

High schools/colleges hire staff if needed.

Planning student schedules.

Conclusion

The NCCCS Career and College Ready Graduate Alignment Partnership team believes the current plan has strong potential for success as it is designed to ensure that:

1. Input and participation from the community colleges, DPI, LEA's and high school teachers has been incorporated at every phase.
2. The possible need for multiple strategies to sufficiently address the State-wide need is identified and supported.
3. The program is built on policies already in place as well as partnerships with work already occurring within the State.
4. Students who successfully complete the program should be career and college ready, including all public higher education in North Carolina.
5. Students that were not able to complete the entire program will still be able to reduce their developmental education footprint when enrolling at their community college.
6. Data from Phase II, will greatly increase the "n" of Phase I and more accurately, inform Phase III.
7. The NCCCS is beginning a developmental education redesign. Statewide rollout is currently planned for fall 2020, perfectly aligning with the requested extension for CCRG.

DRAFT