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

Report to the North Carolina General Assembly

Competency-Based Assessments and Teaching Model *Session Law 2019-212*

Date Due: May 15, 2020
DPI Chronological Schedule, 2019-2020

NC DEPARTMENT OF PUBLIC INSTRUCTION
Mark Johnson, State Superintendent / 301 N. Wilmington Street / Raleigh, North Carolina 27601-2825

Visit us on the Web: www.dpi.nc.gov

Introduction

This report addresses the requirements stated in Session Law 2019-212, Part VI. Competency-Based Assessment and Teaching Model Section 6:

Pursuant to the intent of the General Assembly expressed in Section 8.12 of Session Law 2015-241, the State Board of Education shall determine and analyze the steps necessary to transition to a competency-based assessment and teaching model for all elementary and secondary students. Based on its analysis, the State Board shall recommend transition steps that accomplish the following competency-based objectives:
(1) Students advance upon mastery.
(2) Competencies are broken down into explicit and measurable learning objectives.
(3) Assessment is meaningful for students, accomplishes the goals of the statewide testing program for measuring student achievement and student growth, and complies with the conditions of federal grant funds.
(4) Students receive differentiated support based on their learning needs.
(5) Learning outcomes emphasize competencies that include the application and creation of knowledge.

In conducting its analysis, the State Board shall examine (i) competency-based assessments in other states, including potential benefits and obstacles to implementing similar systems in North Carolina, (ii) the relationship between competency-based assessments and innovative teaching methods utilized in North Carolina schools, and (iii) any other considerations the Board deems relevant to transitioning to a competency-based assessment and teaching model. No later than May 15, 2020, the State Board shall submit a report of its analysis and recommended transition steps to the Joint Legislative Education Oversight Committee.

To prepare this report, the North Carolina Department of Public Instruction (NCDPI) convened an internal cross-divisional team to address each of the requirements. The consensus of this group was the transition to competency-based assessment and teaching has been grounded at the local level, not the state-level. However, several policies and practices supported by the NCDPI align with a competency-based focus, most clearly as an approach to teaching and learning.

To give context to competency-based assessment and teaching in North Carolina, this report provides details on these policies and practices with consideration of the state's role in this effort. The report addresses competency-based teaching, and separately, it reviews the assessment implications for competency-based teaching.

Competency-Based Teaching

The first task of the internal review team was to affirm a common understanding of competency-based teaching as it applies to North Carolina, and its applicability and relationship to personalized learning. The NCDPI has been engaged in supporting personalized learning for several years.

As a foundation for these discussions, the team reviewed the work of the NCDPI as part of the Regional Education Lab Southeast's Competency-Based Education Alliance. Also participating in this work were RTI International, North Carolina Community College

System, the University of North Carolina System, North Carolina Independent Colleges and Universities, and others. These partners met regularly to ensure a collaborative workspace to research and to develop best practices for the implementation of competency-based education in North Carolina. As a first step, the Alliance developed a definition for use in North Carolina among our partners:

> *"As a personalized learning approach, competency-based education provides a flexible and engaging learning environment in which progression is based on mastery of explicit learning objectives, or competencies, as demonstrated through evidence of student learning, rather than the time spent in a course/topic."*

The internal group affirmed the Alliance's definition, and based on work with the REL Southeast and other national-level groups, further clarified the role of competency-based learning at the school-level and at the state-level:

> *Competency-based learning or competency-based education involves strategies that provide flexibility in the way that students demonstrate mastery of learning. A competency-based approach involves personalized learning opportunities, that may include strategies utilizing online and blended learning, dual enrollment and early college high schools, project-based and community-based learning, and credit recovery, among others.*
>
> *Many states have created policies to support competency-based learning, and the work to support such learning includes an increased emphasis on personalized, competency-based learning environments.[1]*
>
> *There is a significant trend of states creating policies to support competency-based learning across the country.* Most *of the work to create personalized, competency-based learning environments takes place within local school systems. However, when there is synchronization between policy and practice and when there is collaboration and partnership between policymakers and local school leaders, widespread transformation can take place. Students can access educational opportunities that will enable them to succeed in higher education, in the workplace and in life.*

Consistent with this perspective, this report provides a review of the state-level work that supports local efforts to implement competency-based learning. With state-level policies and procedures that incentivize, support, and optimize competency-based learning, district-level and school-level implementation will be more likely to be successful. Local decision makers have a more complete understanding of their schools, strengthening the likelihood of long-term success. The state-level policies and practices provide a scaffolding approach for the implementation of competency-based teaching, supporting all districts and schools, regardless of the extent their engagement in competency-based teaching.

To provide a foundation for this report, the first sections that follow address the state-adopted content standards, as these standards are the beginning for all instructional decisions. The subsequent sections provide information on current state practices in place that support

---

[1] Frost, D. (2018). Competency works releases updated competency education state policy map. iNACOL. Retrieved from https://www.inacol.org/news/competencyworks-releases-updated-competency-education-state-policy-map-for-the-united-states/

competency-based teaching at the local level. The report concludes with considerations for assessments aligned to competency-based teaching.

A. North Carolina Standard Course of Study

The North Carolina Standard Course of Study (NCSCOS) defines the appropriate content standards for each grade level, or proficiency level, and for each high school course to provide a uniform set of learning standards for every public school in North Carolina. These standards define what students are expected to know and be able to do by the end of each school year or course.

With these standards as the foundation, local school leaders make decisions about the comprehensive curriculum that they choose to deliver to students so that they can reach the content standards for every grade and subject. In addition, local schools and districts may offer electives and coursework that is above and beyond the NCSCOS. Classroom instruction is a partnership between the State, which implements the SBE-adopted NCSCOS, and local educators who determine the curriculum materials used to deliver instruction to fulfill the standards.

SBE Policy, SCOS-012, requires that each content area's standards be reviewed every five-to-seven years to ensure the NCSCOS consists of clear, relevant standards and objectives.

There are several content areas that have moved to a proficiency-based approach, including Arts Education standards at the high school level; English Language Development standards (K–12); World Language standards (K–12); and Guidance standards (K–12):

- In Arts Education, all high school standards are written as mastery-based standards. Students progress through Beginning, Intermediate, Proficient, and Advanced levels of standards once they have achieved mastery of the current level. None of these areas are measured on state-wide assessments.
- The proficiency-based English Language Development (K–12), standards are organized across four language domains (speaking, listening, reading, and writing). These standards and the aligned WIDA ACCESS assessment support multilingual learners with attaining English language proficiency according to state criteria.
- The proficiency-based North Carolina World Language Essential Standards (K–12) have outcome expectations for each standard (language skill or communication mode) that students must meet by the end of the course, grade span, or program. The proficiency outcomes are based on research, student developmental levels, and the type of language. The proficiency level descriptors come from the National American Council on the Teaching of Foreign Languages (ACTFL) proficiency scale that defines language acquisition. These outcomes in the standards are used for student promotion or continuation to the next course, grade span, or program, as well as placement in programs, so that students can continue to build proficiency in the language of study.
- The K–12 Guidance Essential Standards are designed and intended to be utilized by any educator to support the overall cognitive, career and personal/social development of every student. School counselors collaborate with teachers and other school personnel to help facilitate delivery and integration of these standards, not only providing activities and services themselves, but also helping classroom teachers and

3

other educators to better understand how they can integrate Guidance Essential Standards into the content they are already teaching. The appropriate developmental order of the Guidance Essential Standards K–12 are: RED - Readiness/Exploratory/Discovery; EEE - Early Emergent/Emergent; P – Progressing; EI - Early Independent; I – Independent.

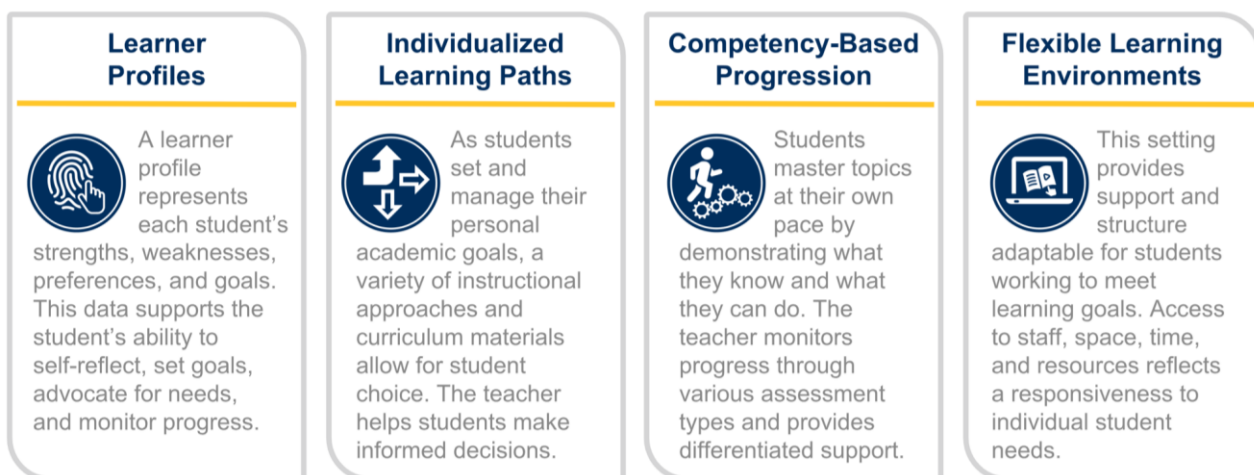## B. Career and Technical Education Courses and Modules

Career and Technical Education (CTE) has historically implemented a proficiency-based approach to student mastery learning. This approach is similar to a competency-based approach, and the terms have been used interchangeably to describe the content development for CTE courses. Over the past ten years, the increase in credentials and certifications have allowed CTE to more effectively align workforce needs, student skill development, and competency-based assessments. This remains an ongoing process as the districts and schools refine implementation.

When students complete modules, certifications, and credentials, they may progress to others and ultimately advance to further coursework.

C. Personalized Learning Framework

With the approval of North Carolina's Every Student Succeeds Act (ESSA) in 2018, the NCDPI committed to the continued transformation of schools and districts across the state from industrial-age practices to digital-age practices.[2] In the digital-age classrooms, all students and educators may have access to unique learning experiences based upon individual needs and aspirations. As such, the NCDPI has developed a framework for Personalized Learning underpinned by four research-based and student-centered pillars: Learner Profiles, Individualized Learning Paths, Competency-Based Progression and Flexible Learning Environments (Figure 1).[3]

Figure 1. Personalized Learning in North Carolina: A Working Definition

Learner Profiles	Individualized Learning Paths	Competency-Based Progression	Flexible Learning Environments
A learner profile represents each student's strengths, weaknesses, preferences, and goals. This data supports the student's ability to self-reflect, set goals, advocate for needs, and monitor progress.	As students set and manage their personal academic goals, a variety of instructional approaches and curriculum materials allow for student choice. The teacher helps students make informed decisions.	Students master topics at their own pace by demonstrating what they know and what they can do. The teacher monitors progress through various assessment types and provides differentiated support.	This setting provides support and structure adaptable for students working to meet learning goals. Access to staff, space, time, and resources reflects a responsiveness to individual student needs.

Informed by ongoing research conducted by the Rand Corporation: www.rand.org/topics/personalized-learning.html

[2] NCDPI. (2018). *Every Student Succeeds Act*. Retrieved from http://www.ncpublicschools.org/succeeds/

[3] Pane, J., Steiner, E., Baird, M., Hamilton, L., & Pane, J. (2017). *Observations and guidance on implementing personalized learning*. Santa Monica, CA: RAND Corporation. Retrieved from https://www.rand.org/pubs/research_briefs/RB9967.html

In 2017, RAND education experts on Personalized Learning reported that "early evidence suggests that personalized learning can improve achievement for students, regardless of their starting level of achievement."

The learner profile helps the teacher and the student identify learning needs, monitor progress, set goals, and build the learning path. This data from the learner profile helps the student find greater successes as the teacher is more likely to anticipate challenges before the student performs poorly or fails.

The individualized learning path allows all students to receive the appropriate level of instruction and differentiated support. Students set learning targets based on their different learning needs, while the teacher closely monitors each student and provides them with choice based on their strengths, weaknesses, interests, and goals.

Within competency-based progression, the students can work at their own pace to reach mastery of the standards, strengthening their self-confidence, resiliency, and self-advocacy.

Finally, flexible learning environments can help educators leverage the use of space, time, access to supports and resources in the school setting and beyond to meet the needs of all students, especially the needs of high-need students that may not be able to be adequately addressed in a traditional, industrial-age classroom environment.[4]

D. Home Base Suite of Tools

Since its inception in 2013, Home Base has developed into a comprehensive suite of tools that provides management of student data, educator evaluation, professional development for educators, and access to learning resources aligned with the North Carolina Standard Course of Study. This suite of digital tools and instructional resources is designed to empower teachers, engage students, provide data, support administrators and connect parents to their child's personalized learning. Each of the student-centered applications within Home Base are provided to all North Carolina districts for free or at a low-cost through state-level convenience pricing.[5]

- **PowerSchool** is the official student information system for storing and managing student data. It maintains over 1.4 million student records and provides robust capabilities for educators and administrators to effectively manage school processes. It reinforces personalized learning by offering the ability to tailor a student's instructional path with his or her interests, skills and goals, and utilize "PowerTeacher Pro" for standards-based grading and quick access to student data.
- **Schoolnet** allows educators to build lesson plans, create instructional materials and supplement their teaching with digital resources. This tool gives teachers the ability to create and modify assessments as well as receive results in real-time with relevant data for reporting purposes. Schoolnet supports personalized learning by utilizing its resource bank to house materials that are appropriately aligned with individualization and student career paths.

[4] Braaten, E., (2019). *Scaling Personalized Learning in North Carolina.* Raleigh, NC: NCSU.
[5] NCDPI. (2018). *Home Base.* Retrieved from https://homebase.ncpublicschools.gov/

- **Canvas** is a learning management system (LMS) that provides a platform to connect different digital tools and resources in one location for teacher, student, and parent access at any time and any place. Canvas supports personalized learning by better facilitating the use of learning paths, student assessment and teacher feedback, and collaboration.
- **#GoOpenNC** provides North Carolina educators access to openly licensed supplemental instructional resources aligned to the North Carolina Standard Course of Study. Educators can collaborate to curate and create personalized resources to meet the needs of their learners. #GoOpenNC supports the personalized learning of students and educators with collaborative tools and resources to promote active feedback and revision of instructional materials.

E. Digital Learning Competencies and Standards

In 2013, the North Carolina General Assembly passed House Bill 23, calling on the SBE to develop digital teaching and learning competencies that would "provide a framework for schools of education, school administrators, and classroom teachers on the needed skills to provide high-quality, integrated digital teaching and learning."[6]

These competencies demonstrate skills that teachers and leaders should integrate into their practice in order to create digital learning environments. In 2016, the SBE approved the Digital Learning Competencies (DLCs) for Teachers and for Administrators to improve their practices and to drive student learning within classrooms. The DLCs are to be viewed within the context of the current North Carolina Professional Teaching Standards and the North Carolina Standards for School Executives and are extensions in relationship with the ways that digital technologies impact and affect schools.

DLCs for Administrators	DLCs for Teachers
Vision & Strategy	Leadership in Digital Learning
Content & Instruction	Digital Citizenship
Human Capacity & Culture	Digital Content & Instruction
Personal Growth & Connectedness	Data & Assessment
Community	

In 2017, the SBE updated the licensure renewal requirement so all teachers and administrators renewing their professional licenses, beginning in 2019, are required to earn two continuing education credits (CEUs) aligned with Digital Learning Competencies. As administrators and

---

[6] NCDPI (2016). NC Digital Learning Competencies. Retrieved from https://www.dpi.nc.gov/districts-schools/districts-schools-support/digital-teaching-and-learning/digital-learning-nc

teachers work to implement these competencies in their practice, students are better enabled to engage in digital-age learning environments for the application and creation of knowledge.

In 2019, the SBE approved the Digital Learning Standards for Students (DLS)[7] designed to be integrated by classroom teachers and other licensed staff within the NCSCOS. With the adoption of the International Society for Technology in Education Standards for Students, each North Carolina educator will incorporate the DLS in every subject and grade level to support content learning.

Empowered Learner	Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.
Digital Citizen	Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.
Knowledge Constructor	Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
Innovative Designer	Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.
Computational Thinker	Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.
Creative Communicator	Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.
Global Collaborator	Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

F. Professional Development for Public School Units

REL Southeast CBE Alliance.
The NCDPI partnered specifically with the REL Southeast (Regional Educational Laboratory) and RTI in 2018 to host an event focused on "Identifying and Eliminating Barriers to Competency-Based Education and Personalized Learning State-wide in North Carolina." LEAs who were making progress locally on these efforts were invited to work with the NCDPI, RTI, and the REL Southeast to learn about innovating competency-based education

---

[7] NCDPI. (2019) NC Digital Learning Standards. Retrieved from https://www.dpi.nc.gov/districts-schools/districts-schools-support/digital-teaching-and-learning/dtl-standards

practices around the state, identify challenges that slow innovation, and develop strategies for ways to remove these challenges and barriers.

In 2019, the NCDPI collaborated with the REL Southeast to facilitate eight meetings held regionally across North Carolina focused on "Measuring Success Through Competency Based Learning." In alignment with the NCDPI's efforts, each workshop was intended to help participants develop an awareness of the need for personalized learning, explore relevant and usable information about personalized learning (connecting to the vision for North Carolina and the four pillars), review and learn from examples of personalized learning, and identify next steps related to planning and implementing personalized learning at the school or district levels.

Additionally, the NCDPI conference Connecting Communities of Education Stakeholders (CCES) provided professional development and resources in 2019 for educators through a three-day, statewide event focused on "Innovative Pathways to Personalized Learning."

G. Funding and Resources for Public School Units

Digital Learning Initiative Grants
Intended to spread effective digital teaching and learning practices across North Carolina, competitive grants support districts as they address challenges, harness opportunities, and leverage resources. From 2017 to 2019, the SBE awarded 64 grants to a diversity of school districts and schools: the grant recipients represented each of the eight SBE Districts, urban and rural districts, and low-performing or Tier 1 school districts. Three grant types provided opportunities for districts (1) to plan for digital-age initiatives (Planning Grants), (2) to implement digital-age initiatives (Implementation Grants), and (3) to serve as model demonstration sites (Innovation Academy Grants).

Among the awardees for 2018–19, 11 of the 32 districts identified Personalized Learning for students as a priority. These awardees serve as incubators of effective Personalized Learning practices and as leaders for other districts engaging in this work. By creating these hubs of innovation that support North Carolina educators in their professional growth, a ground-swell effort for personalized learning is growing, and students' access to highly qualified digital-age teaching and learning opportunities continues to increase.

Supports and Guidance.
The NCDPI has developed supports for public school units implementing personalized learning. Each of the items identified below are aligned with the NCDPI's Theory of Action and the 4 Pillars for Personalized Learning:

- *Landscape of Personalized Learning Survey* - Developed by the NCDPI's Digital Teaching & Learning and NCSU's Friday Institute, this survey is intended to provide better understanding of the current status of school-level implementation of personalized learning. The data may be used to better understand how and where student-centered learning is occurring, to develop strategic supports for this work, and to build networks of practitioners across the state.
- *Planning for Personalized Learning Matrix* – The NCDPI has developed a matrix around each of the four pillars. Using this matrix, a school district or school can better

understand implementation of each pillar from the learner's perspective, the teacher's perspective, and the capacity of the district or school.
- *Explore Guides for Personalized Learning* - To help with the operationalizing of personalized learning, the NCDPI has developed guides for educators to better understand and apply each of the four pillars. Through various media and resources, these materials help the educator to better understand each pillar, why it is important, how it is created, and how it is used.

H. Professional Development for the NCDPI Staff

Beginning in December 2017, and continuing through 2019, the Center on Innovations in Learning (CIL) and the South East Comprehensive Center (SECC) provided supports to the NCDPI through a two-day Personalized Learning Institute delivered to more than 150 of the NCDPI staff. An objective of the Institute was to familiarize the NCDPI staff with the ideas and tools that guide and propel Personalized Learning and thus establish a common language to further design and successfully implement a statewide system of Personalized Learning.

Further work towards informing and engaging the SBE and other state-level leaders in Personalized Learning has been facilitated by site visits within districts, hosting showcase events at the NCDPI building, and presenting at SBE meetings (with national leaders in personalized learning research and North Carolina districts at varying stages of implementation).

I. Credit by Demonstrated Mastery

The State Board of Education (SBE) adopted Credit by Demonstrated Mastery (CDM) as an option for students to earn credit for a course (State Board Policy CCRE-001). In this process, based upon a body-of-evidence, a district or school may award credit in a course without requiring the student to complete classroom instruction for a specified seat time (typically hours).

The SBE defines mastery as a student's command of course material at a level that demonstrates a deep understanding of the content standards and the ability to apply knowledge of the material.

Students demonstrate mastery through a multi-phase assessment, consisting of (1) a standard examination, the end-of-course test or the NC Final Exam where applicable, or a final exam developed locally, and (2) an artifact which requires the student to apply knowledge and skills relevant to the content standards. The district or school may require additional requirements, such as performance tasks.

This multi-phase assessment process builds a body-of-evidence that allows a committee to determine if the student has a deep understanding of the standards for the course or subject area as defined by the North Carolina Standard Course of Study. This process allows students to earn credit for a course without being constrained by the requirement to meet participation in a class, as stated in the definition of competency-based education: "progression is based on mastery of explicit learning objectives, or competencies, as demonstrated through evidence of student learning, rather than the time spent in a course/topic."

The NCDPI provides a resource with guidance and tools to support districts' and schools' implementation of CDM.

J. Differentiated Education Plans and Advanced Learning Opportunities

Differentiated Education Plans are for those students identified as Academically and/or Intellectually Gifted students. These plans are developed locally and outline services provided to enrich, extend and accelerate the Standard Course of Study to address the students' advanced learning needs. These plans are aligned to N.C.G.S. § 115C-150.5-.8.

North Carolina students have access to an array of differentiated advanced learning opportunities based on their academic needs and interests. In the 2018–19 graduating class, 55,739 graduates, representing 51% of all graduates, earned high school credit for college-level courses during their high school careers. College-level courses are those defined as Advanced Placement (AP), International Baccalaureate (IB), Cambridge, community college or university courses.

K. Assessment Implications for Competency-Based Teaching

To meet federal law, the assessed content standards must be adopted by the SBE and the associated assessments must assess the breadth and depth of those content standards. All students must be assessed on all content standards. The only exception is a content standard that is not accessible in the standardized test format, such as listening or speaking.

As instruction is competency-based and targeted to the needs of the learners, it is anticipated that student achievement would increase. However, this is dependent on strong alignment of the instruction to the content standards. Currently, the Innovative Assessment Demonstration Authority, approved by the U.S. Department of Education, is being developed to provide an assessment system that utilizes interim assessments and a summative assessment that is more appropriate for students' needs. The data from the interim assessments will be timelier, providing through-grade data that will inform teachers on how instruction should be adjusted to increase student achievement. These assessments will support local efforts to engage in competency-based teaching.

Conclusion

This report is an overview of competency-based teaching with the focus on state policies and practices that provide support for local implementation. To provide a comprehensive view of competency-based learning throughout North Carolina, an in-depth analysis of district- and school- level implementation is appropriate. Likewise, consideration of the State's role in building capacity for schools to transition to competency-based teaching would be valuable. For such an analysis to occur, funding and human capacity would need to be addressed.