NC Check-Ins 2.0
Biology Specifications

Purpose and Overview

NC Check-Ins 2.0 are interim assessments are developed by North Carolina Department of Public Instruction (NCDPI) and are aligned to the North Carolina Standard Course of Study (NCSCOS). There are four NC Check-Ins 2.0 that can be administered in both the yearlong and semester format. Each NC Check-Ins 2.0 focuses on a strand of the NCSCOS for Biology (From Molecules to Organisms; Ecosystems; Heredity; Biological Evolution). All NC-Check-Ins 2.0 interim assessments are available to Public School Units (PSU) on a voluntary basis.

The main purpose of NC Check-Ins 2.0 is to provide students, teachers, parents, and stakeholders with immediate after-test data and a reliable estimate of students' current performance on the selected subset of content objectives. A secondary purpose is derived from NC Check-Ins 2.0s' strong relationship with the end-of-course (EOC) summative test for biology. Both the EOC and NC Check-Ins 2.0 share a common item bank aligned to the new content standards, and performance on the NC Check-Ins 2.0 serves as an early indicator of a student's level of preparedness for the EOC summative test.

The NCDPI does not have validity evidence to support using results from NC Check-Ins 2.0 as a predictor of student performance on the EOC summative test. Even though there is evidence of a strong correlation between scores from NC Check-Ins 2.0 and the EOC, this correlation evidence by itself does not signify prediction. The overall value of NC Check-Ins 2.0 is the use of data for formative purposes throughout the year to help students and teachers adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.

Content Specifications

The following content specifications are for test development purposes only and are not presented as a pacing or curriculum recommendation. The delivery of curriculum and instruction is a local decision. It is the expectation that Disciplinary Core Ideas (DCI) objectives within a strand may not always be taught in isolation; some schools will not have covered all objectives assessed in any one NC Check-Ins 2.0. The Science and Engineering

Practices (SEPs) adopted as part of the science content standards are expected to support a greater emphasis on how students develop and engage with science knowledge.

Items on the NC Check-Ins 2.0 are either aligned to a DCI objective only or a combination of a DCI objective and an SEP. The pairings of DCIs and SEPs are random, and it is possible all items that appear on an NC Check-Ins 2.0 might not represent the exhaustive combination of potential DCI and SEPs mappings. The content blueprint shows the list of DCI objectives for each NC Check-Ins 2.0 and a subset of SEPs that can be reliably assessed given the test format. The SEPs assessed are divided into higher and lower frequency categories. For items aligned to a DCI and SEPs combination, it will be most likely that the SEPs will be from the higher frequency category.

Schools are advised to use their professional judgement in deciding the most appropriate time within the available window to administer each NC Check-Ins 2.0 interim that will yield the most valuable feedback to support students and instruction.

The NCSCOS for science may be reviewed by visiting the NCDPI/Academic Standards for science webpage.

Table 1. Content specifications for NC Check-Ins 2.0 Biology

Interim Name	Strand	Assessed Objectives	Science and Engineering Practices (SEPs) (Commonly Assessed)
NC Check-Ins 2.0 A	From Molecules to Organisms	• Bio.1.1 • Bio.1.2 • Bio.1.3 • Bio.1.4 • Bio.1.5 • Bio.2.1 • Bio.2.2 • Bio.3.1 • Bio.3.2 • Bio.3.3	<u>Higher Frequency</u> • Analyze and Interpret Data • Use Models • Use Mathematics and Computational Thinking • Construct an Explanation • Carry Out an Investigation <u>Lower Frequency</u> • Engage in Argument from Evidence
NC Check-Ins 2.0 B	Ecosystems	• Bio.4.1 • Bio.4.2 • Bio.5.1 • Bio.5.2	
NC Check-Ins 2.0 C	Heredity	• Bio.6.1 • Bio.6.2 • Bio.7.1 • Bio.7.2 • Bio.7.3 • Bio.8.1 • Bio.8.2	
NC Check-Ins 2.0 D	Biological Evolution	• Bio.9.1 • Bio.9.2 • Bio.9.3 • Bio.9.4 • Bio.10.1 • Bio.10.2	

NC Check-Ins 2.0 Format

The NC Check-Ins 2.0 are interim assessments administered online via the NCTest platform unless a paper format is required for students with a documented accessibility need. Each interim assessment is made up of twenty-five questions; question types include four-response-option multiple-choice and technology-enhanced item types presented as standalone items or as part of an item set. For items presented as part of an item set, students will be provided reference material associated to all questions in the item set.

Administration and Review

To accommodate local control of curriculum, the NCDPI will offer a flexible administration and review window for all interims that will open the first week of September to the end of May. Public school units (PSUs) may choose to administer interims in the order that best aligns with their curriculum. Each NC Check-Ins 2.0 for biology should only be given once within any given year.

Proctors are not recommended for the administration of interims. The interims are not timed; however, the estimated time for most students to complete an interim is about ninety minutes. Schools have the option to administer the interims in one school day or over multiple school days. For multiple school days, the total administration time can be divided into mini sessions.

The interim item-review window for teachers will also be available from the first week of September to the end of May. Teachers may access interim forms after administration so they can conduct formative reviews with their students. The main purpose of these interims is to provide reliable formative data on course-level-specific content objectives so teachers may adjust instruction. Previewing or disclosing interim content to students before an administration may result in unreliable score with serious validity concerns about inferences of student performance on course-level-specific content objectives.

Supplemental Materials and Additional Resources

Online test read aloud in English is available as a designated feature to assist with the reading load of the biology test items. The online read aloud is computer-generated modulation, not human vocalizations. Students do not need an individualized education plan (IEP) to qualify. The teacher will have to approve the read aloud designated feature for students prior to testing. It is recommended students have routine access to such technology during regular classroom instruction.

The NCTest tutorial page has been updated to include science item set practice. These practice questions are not included in the Online Assessment Tutorial requirement and may be accessed via https://data.ncsu.edu/nctest/Tutorial.html#StudentSignIn.

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