IV-25: AIM Conference Padlet Responses

IADA AIM Conference Presentation

Collecting information about the NC Interims

SHANNONJORDAN3   NOV 19, 2021 02:42PM

So what do you think? General overview and comments?

General Overview

For districts who are already administering check-ins, I don't think they will see much difference. One of the recurring complaints from teachers in my 25 years with my school system has always been around testing kids on a grade level assessment when we know they aren't performing on grade level, not English proficient, etc. Terms like cruel get thrown out. The fact of the matter is the grade level assessment is a federal requirement and isn't changing that we know of. That seriously limits what we can do to address that complaint from teachers. The check-ins have given us the formative information we needed to better prepare our students to be successful on the summative year end assessment.

NC CHECKINS

Is it possible to modify the NC CHECKINS to contain 3 domains with 5 standards....work on fixing the security issues, etc .... seems like we are trying to make something new that is not needed

Correlation

If we are moving to three [2] required interim assessment and a summative ...then, a correlation is needed.

If a student is satisfactory on all interims - then, what does this equate to on a summative??

Still some confusion over the "flexible" nature of the 4th assessment - so a student who comes into that test at a higher level is taking all upper level questions - but the same number of questions as everyone else . . . but a lower level student starts with easier questions ... this seems like a good thing for lower students . . . not that great for higher level students.

I love how the focus is on formative assessment. This can help empower teachers by having more detailed information, and make it feel less stressful for students to help ease the levels of anxiety that has seemed to have risen throughout the years due to testing.

Thank you for this difficult work. I love the focus on formative work that is more meaningful for outcomes for students.

Large numbers of students are not proficient. Since these measures do not indicate how far below grade level the students are, teachers do not really know what to do next for these students. Teachers need to know how far below grade level students are.

The solution is leave the EOGs as is for accountability. Use formative assessments that are truly adaptive and innovative and provide teachers with information about how far above or below grade level students are.

531

adaptive is being equated to off level grade content -- even though that is not what is meant ....please do not use the adaptive language

Why not just keep the NC CHECKINS? Why the need to develop something different

> *I agree. It would be more appealing to teachers for something to feel like it is staying constant and then use the checkins as a gauge for the flexible summative.* — ANONYMOUS

> *I agree! Not sure what is wrong with the Check-Ins. Our teachers have become accustomed to the Check-Ins and appreciate the data and information they receive from the Check-Ins.* — ANONYMOUS

Thank you for this opportunity to give feedback. I appreciate that the text is "grade-level adaptive." I do appreciate that we do not want these assessments to become more 'high stakes tests.' I also appreciate that testing desires feedback from many involved individuals, including classroom teachers.

I am not thrilled with requiring 4 assessments [3 interims and 1 summative]

What is needed for the interims and flexible summative to support instruction?

interims and flexible summative

The interims and flexible summative needs to be standards aligned and accessible for students with common language. The interims need to have the math standards divided up appropriately with those divisions clearly communicated to districts so they can adjust their pacing guides accordingly. Frankly they need to align to the math frameworks that so much time, effort, and money have been expended on already. The ISR that parents receive at EOY should also be added to student powerschool records or into cumulative folders for next year's teacher to be able to access. I found those extremely helpful in how they broke down the results and showed where the students performed along that continuum.

Break apart the ELA Standards 6.RL/RI.1 (Literature and Informational Text should be reported separate

For the interims to follow a developmental and research-based progression for mathematics learning - to follow the progression of the Math Instructional Frameworks. These interims will determine pacing and progression of instruction in each district. It is vital that the math standards assessed on each interim are purposefully selected and grouped to align with research on learning rather than specific curriculum programs.

Better reports for ELA teachers are needed, and not just by strand. The reports should be by standard, and not just reading for information, reading for information, and language. Reports should include all the standards.

I do not know who determines what standards are covered by the first NC Check-In, but I can speak from the classroom perspective, and the first Check-In (using our current 'interim assessment' as an example,) covers TOO much content in 7th grade math. It's overwhelming!! I know 8th grade math teachers feel the same way in my school. Can this be adjusted? I use the data from the first Check-In, but I have to "understand" that there is content that students have not been exposed to. We are given a date to give the first NC Check-In within a testing window. I'm not familiar with their being a larger scale flexibility - comment below.

> *Are you given a hard date for check in 1? You shouldn't be. The window is open all year long and you should be able to give it when you are ready, not on date X, when you still have 3 objectives to cover.* — ANONYMOUS

> *My experience has always been their is a testing window for the first Check-In, and our school chose a time within that timeframe. In the past, my understanding was that the Check-Ins were taken off the testing system. I have noticed that all of the assessments are on the system this year, but I don't remember seeing this in the past. However, I'm a classroom teacher and not a testing director, etc. So, it is highly likely there is information I don't know.* — ANONYMOUS

Provide a standards report to show student mastery of each grade level standard.

NC CHECKINS are currently used to support instruction but currently the security is open and flexible -- too much pressure to ensure it is not downloaded

Provide information about how far above and below grade level students are.

How can the interims be positioned as a classroom resource, not another testing event?

Is there way that the interims be based more on a continuum of learning (similar to MAPS vs. based on grade-level standards) to better provide data that shows how students are truly performing and growing? Absent of that, some of our EC and AIG students will not be provided with data that can be as useful in meeting them where they are at. Also, you will force districts to continue to have to use a program like MAPS, meaning more testing and loss of instructional time.

classroom resource

Messaging is key - I'm not sure that the state can do more than they already are with Check-ins. People are going to hear what they want to and interpret the same information slightly differently. Once these formative assessments are now tied to a summative at the end the whole tone will change even when the explanations are given. How districts handle this will set it up to succeed or not. . .

There have to be clear expectations that the results be used to re-engage students with the content needed to work towards mastery. This can't just be a compliance check mark!

training

We do not consider it another testing event and we do not use the word test! NCDPI needs to change their verbiage......but, we also need to look at how the guides are worded
page 5 of the guide - violation of the NC testing code of ethics. Makes it seems like a test

I think if the test are tied to some sort of teacher growth model, then it becomes another testing event. A teacher who cares does not want to "look bad" when their results are compared to another teacher. I think this needs to be viewed as a way to help the kids get where they need to be...and this needs to be emphasized.

That has to come from the Testing Directors - the message coming from them guides the feeling in the district. The security over the items and use of the tests afterward is currently very strict and sends a message of "testing event."

Interims and NC CHECKINS are a classroom resource.....not understanding the need to create something different

Make them truly adaptive and provide "what next" resources.

Protect them from being used for purposes other than informing instruction. They should not be used for growth calculations.

What data from the interims is needed to support public school units?

data from interims

The data we get back from the check-ins is extremely helpful. Being able to get the data in a spreadsheet that can be sorted and filtered would be life changing.

One thing that would be helpful with the ELA results would be to have an explanation about why the answer is what it is and/or why the other choices aren't correct. I think

many teachers struggle with this thought talk and processing that is invaluable for students during next steps.

when a school report is updated with students that test later - can the report have a date so we can see which students were added

How will the standards be selected for each assessment? Too much money has been invested across the state on curricula for reading and mathematics -- what is the pacing of the standards? All are not teaching the standards at the same time

Provide information about how far above and below grade level students are.

Please do not just give data for ELA based upon the strands reading for information, reading for literature, and language. This is a great disadvantage for teachers and students. ELA assessments should provide data reports for teachers, students, and families based on all the standards assessed, just like is given for math reports. Otherwise, the formative assessment data is pointless because teachers cannot pinpoint what students truly need to personalize instruction based on student need.

How do we approach data on an assessment with a formative purpose and a classroom focus?

data from formative purposes

The data HAS to be used to address each students' needs and looking for trends and/or patterns overall. These results can also be used to look for rock stars in our district regarding specific standards and how can those results be replicated in other classrooms for the betterment of the students.

I like the item analysis, like with NC Check-Ins.

currently the way NCCHECKINS must be downloaded by each teacher ....make a way for the test administration can be processed for all similar to the same way the ISR processing occurs ....right not it is way too time consuming ...

Immediate feedback with data reports that are easy to interpret. Data that can be used across students, teachers, grade level and schools. The ability to analyze errors and re-teach based on that.

The same way we are currently using NC CHECKINS -- the item analysis is great! The ability to allow teachers to review questions is excellent ....concern about it being open to all throughout the year -- teachers 'may' use the questions instructionally prior to taking an assessment

Is the information on the Individual Student Reports presented to parents in an understandable way?

ISR for interims

The ISR for the interims look very straight forward. I think "Not Yet" and "Meeting Expectations" would be better for the continuum. It' aligns with growth mindset language and is still clear for parents. I also think that there needs to be an * that says that these specifics listed in each strand is only a part of the total with the curriculum

website address listed in case parents want to get more comprehensive curriculum information.

I like the parent friendly language rather than the standard numbers.

The words "approaching" and "Satisfactory" may not be the words you choose, but they are positive and that is important.

I like the new report that was shown during the presentation. It is more parent friendly using the sliding scale for families.

No... most of them are not teachers. The parents tend to look at one thing - the level. Many may not even understand terms within the standards/content areas listed on the reports.

How could the ISRs be more accessible to parents?

Thank you for loading these into parent portal

Can we add information on how and what parents can to help students once receiving ISR

The new report shows the parent-friendly language is more accessible. The sliding scales also make it more accessible to understand the data.

In your experience, what other information do parents find useful?

parent information

Parent nights, informational videos, streaming events, website posting, etc. what is being measured when and how can they assist their children. That's what they want to know.

How their student is doing in comparison to their class and the school grade/subject as a whole

As a parent, I want it all - the report is currently helpful - but I want access to my child's EVAAS data - projection, history,etc. At the beginning of the year in particular (well - whenever it finally comes out) and with the ISR at the end to see if he/she made that goal.

How their child compares to others

In my experience, the vast majority of parents want to know proficient or not proficient. I've been asked exactly 1 time in 26 years about the specifics of how a child did.

Is there consistency in how the mathematics standards are taught across districts?

math pacing

No - math standards are definitely not being taught in the same order or with the same amount of focus across districts in NC. In my opinion the interims need to be aligned with the math pathways that were designed a few years ago through grant funding and the expert groups who worked on that. If other districts chose not to align with those pathways, that was their choice. There has to be a uniform assessment and that requires a uniform division of those math standards in each grade level.

The selection of standards on the interims will ultimately drive pacing and the progression of math instruction (whether this is intended or not). Teachers want valuable and useful information from the assessments. Therefore, they want to be sure the standards are taught before the assessment. This ultimately drives math pacing and instruction. Even if they can take the assessments at different times, the grouping of the standards is important.

No

deal breaker

There does not seem to be any consistency with mathematics ..... too much money has been spent in districts on math curricula to teach in a different manner

How valid will interims be ....if they cover standards that are grouped together but not taught in a particular time line

How would you address date on standards that have not been taught?

data on standards not taught yet

Messaging is key - Educators have to explain to students and parents that students might see something they haven't taught yet. If there are LOTS of standards that are being tested but not taught in a classroom or grade level, then administrators can intervene in a timely and get things back on track for those students BEFORE it's too late at EOY.

For the data to be useful to teachers and schools, the math standards need to be taught. This influences future instruction and next steps.

Would it be possible to take a survey, checking which standards had been taught prior to taking the assessment. Many students get frustrated over how the assessments cover standards that haven't been covered on the assessments. This is includes ELA.

With flexibility, you shouldn't give a CheckIn or Interim until standards have been taught.

Should we keep the name NC Interims or change to...?

name

Not everyone has received the Check-ins as Pitt County shared during this session. Not to mention, if the check-ins are changed and feeding into the flexible assessment, while 3rd grade is still giving the current version, there will be confusion. I think Interim is better than benchmark and detaches any bad feelings that have been come up regarding check-ins with some districts.

Change it. Interims is too technical. Give it a "fun" name. Also quit saying adaptive. Describe it as starting point flexible. Progression of difficulty...something.

Don't change anything until we know it is going to work....right now, too much unknown

Rename the whole process, make it fresh and do away with the "old"

Change to an adaptive assessment that tells teachers how far above or below grade level students are. Also partner with curriculum and instruction to provide teachers with information about what next steps should be taken.

Ignore the federal accountability with these interims so that you can create a tool that is actually helpful for the ~750,000 students that are above or below grade level.

I think a full rebranding would be helpful- with clear explanation!

Should we change the name of the end-of-grade (EOG) or end-of-course (EOC) tests?

EOG and EOC name

I think the name is easy to understand and fits these summative assessments and they need to remain.

No not until it is a sure thing that interims will work

No?? WhY

No, teachers are being bombarded right now with outrageous amounts of change and requirements. I also would not use the term adaptive in the approach to this testing model. I would just inform teachers/admin of the changes made to the approach and how checkin data will be used to modify the entry level of the test.

Don't use the word adaptive

We use true adaptive testing (MAP/nwea) as a universal screener to gauge the health of our core instruction. We have worked hard to distinguish the difference in screeners and interim/standards aligned (check ins eogs unit assessments) as part of our mtss work. This plan and terminology needs to be shown in conjunction with the mtss work and assessments used. A comprehensive assessment plan is needed.

Yes- full rebranding to help change opinion, revamp purpose, etc

No. The fewer changes with the whole process the better.

No. But if you do, definitely don't go the route of Virginia and call them the SOL.... :)

With an online design and administration, how do we ensure all students have access? What are some options and how would this function in a classroom?

online design

The pandemic did force the online assessment delivery. Sharing out the results from the comparison study of the P/P vs. online results.

The Testing Students with Disabilities and Testing English Learners documents need to be modified to help staff and parents know how those accommodations look with regards to online testing especially those questions that require drag and drop, etc.

As far as those still needed paper/pencil administration - I don't think the sticky notes will work. Dictation to scribe would be more appropriate with the test administrator putting the answers in the NC Test Platform. There would have to be a proctor required during testing and the need for three staff members during the answers being keyed in like the marks in book answer recording currently requires.

The read aloud capability of the NC Test Platform is extremely helpful. One consideration is the quality of the headphones. Can the state assist with that like they do with ACCESS testing headphones?

I wouldn't over think this part.....too many of us are doing NCCHECKINS and make it work and several of the EOGS are required online...i think this is a moot point

Limit passage length presenting chunks of information similar to third grade tests to limit scrolling. This can affect students of all grades, and creates unequitable access when it comes to online testing. Also, Lexile levels and engaging passages should also be used. If students are given Lexile levels higher than their grade level or at the top of the grade level span for all assessments, this creates an inequitable test when it comes to accessing materials.

Limit passage length to ensure that is does not require scrolling

We are a 1:1 district and all students will access online unless there is a medical need and students cannot access content using device

Is it fair to EC students who have access to a computer but do not test well on the computer to only have the online option for this test?

You answered this in the presentation — ANONYMOUS

Yes. Accommodations are to level the playing field to provide equal access. Regular education students may do "better" paper/pencil also but are not given that option. — ANONYMOUS

What else do we need to include in the professional development?

Other thoughts . . .

What happens when students don't take 2 of the 3 interims?
For those who require p/p - how will the ordering work as we won't know which flexible assessment they are aligned to take?
Another online class may not be well received after the mental health video requirement and the new LETRS training that is coming out. I'd recommend meeting with a core set of CAOs before deciding the plan for this PD.

Don't use word adaptive at all. Student specific start...Differentiated launch.

local analysis

Teachers do not need more PD
any needs for interims - and analysis should be handled at the local level.....NCDPI does not need to come into this lane

making sure NC Test reports the data for each teacher - what is the signal (connection) for NC Test to show an item analysis report for a teacher.

Nothing at this time.....too much unknown.

More details of what interim is compared to summarize. What experiences a student will have, information that will be available to teachers

Clear explanation of adaptive

✱✱✱✱✱✱

IV-26: NC Council of Teachers of Mathematics Conference Presentation (February 24, 2022)

NCDPI's Innovative Assessment

NCDPI Accountability Services

Maxey Moore
section chief, test development

Beth Nash
test measurement specialist,
middle and high school mathematics and science

Michael Mahoney
test measurement specialist,
elementary

Iris Irving
project coordinator, IADA

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Questions?

Innovative Assessment

- In June 2019, the U.S. Department of Education (USED) granted an Innovative Assessment Demonstration Authority (IADA) to North Carolina

- North Carolina's IADA solution is the Personalized Assessment Tool (NCPAT), an assessment system comprised of three NC Check-In 2.0 resources and a flexible summative test at the end of the school year

North Carolina Personalized Assessment Tool

NC Personalized Assessment Tool

NC Check-Ins 2.0 (2022–23)

Flexible Summative

NC Check-Ins 2.0

- Formative purpose
- Re-engaging students on the same concepts
  - Spiraling of standards
  - Assessing in the middle of instruction
- Data from the NC Check-Ins 2.0 should not be used for grading purposes
- Interims remain voluntary
  - Students participating in the pilot must complete a minimum of two to inform the flexible summative

Mathematics Transition Availability

	2022–23	**2023–24**
NC Check-Ins 2.0	Grades 4, 5, 7, and 8	Grades 3–8
NC Check-Ins	Grades 3 and 6 NC Math 1 and NC Math 3	NC Math 1 and NC Math 3

2021–22 Pilot

- Test specifications for grades 4 and 7
  - 2019–20: Grade 4 test specifications developed
  - 2020–21: Grade 7 test specifications developed
  - Currently in use for 2021–22 NC Interims
- Ongoing psychometric analysis of test data
- Feedback on initial test specifications is collected as part of an ongoing process
  - Revisiting test specifications for all grade levels before we roll out statewide

Psychometric Considerations for NC Check-Ins 2.0

- The current design for NC Check-Ins 2.0 includes the following content specifications:
  - Maximum of 5 standards
  - Minimum of 3 domains
- NC Check-Ins 2.0 may be given in any order
  - Developmental appropriateness/progression of standards
- Testing window remains open October 1 through May 31 each year
  - Student data on 2 interims is needed for participation in the flexible summative

NC Check-Ins 2.0 Administration

- May be administered in multiple sessions
- Suggested time: 90 minutes
- Online administration required
  - Paper option for students who cannot access online platform
- 25 items
- Item types
  - Four-option multiple-choice items
  - Open-ended numeric entry items
  - Technology-enhanced items
- Calculator active and inactive sections

State vs Local Control

- The North Carolina State Board of Education adopts the *NC Standard Course of Study*

- Public School Units (PSUs) select
  - Curriculum/textbooks
  - Pacing

Mathematics Test Specifications Development Process and Rationale

- Reviewed survey results regarding priority of standards and timing of when standards are taught

- Considered test specifications for the existing NC Check-Ins and EOGs

- Considered the grouping of standards for each NC Check-In 2.0, looking at standards that complement one another

- Included feedback from our partners at NCSU-Technical Outreach for Public Schools (NCSU-TOPS) and NCDPI Academic Standards

NC Check-Ins 2.0 Grade Level Test Specifications

Grade 3 Math NC Check-Ins 2.0 Test Specifications

Interim A	Interim B	Interim C
NC.3.OA.1	NC.3.OA.3	NC.3.OA.8
NC.3.OA.2	NC.3.OA.8	NC.3.NF.2
NC.3.OA.9	NC.3.NBT.3	NC.3.NF.3
NC.3.NBT.2	NC.3.MD.7	NC.3.NF.4
NC.3.MD.3	NC.3.MD.8	NC.3.G.1

Grade 4 Math NC Check-Ins 2.0 Test Specifications

Interim A	Interim B	Interim C
NC.4.OA.1	NC.4.OA.3	NC.4.NBT.5
NC.4.NBT.2	NC.4.NBT.5	NC.4.NF.3
NC.4.NBT.4	NC.4.NBT.6	NC.3.NF.4
NC.4.NBT.7	NC.4.NF.1	NC.4.NF.6
NC.4.G.1 NC.4.MD.3	NC.4.NF.2	NC.4.NF.7
		NC.4.G.2 NC.4.MD.4

Grade 5 Math NC Check-Ins 2.0 Test Specifications

Interim A	Interim B	Interim C
NC.5.OA.2	NC.5.NBT.6	NC.5.NBT.3
NC.5.OA.3	NC.5.NF.1	NC.5.NBT.7
NC.5.NBT.5	NC.5.NF.4	NC.5.NF.3
NC.5.MD.5	NC.5.NF.7	NC.5.NF.4
NC.5.G.1	NC.5.MD.2	NC.5.MD.1

Grade 6 Math NC Check-Ins 2.0 Test Specifications

Interim A	Interim B	Interim C
NC.6.RP.1	NC.6.RP.4	NC.6.NS.6
NC.6.RP.3	NC.6.NS.1	NC.6.EE.2
NC.6.NS.4	NC.6.NS.2	NC.6.EE.6
NC.6.G.1	NC.6.NS.3	NC.6.EE.7
NC.6.G.4	NC.6.EE.1	NC.6.G.3

Grade 7 Math NC Check-Ins 2.0 Test Specifications

Interim A	Interim B	Interim C
NC.7.G.1	NC.7.EE.1	NC.7.EE.4
NC.7.NS.3	NC.7.EE.3	NC.7.G.5
NC.7.RP.1	NC.7.EE.4	NC.7.G.6
NC.7.RP.2	NC.7.NS.3	NC.7.SP.7
NC.7.RP.3	NC.7.RP.3	NC.7.SP.8

Grade 8 Math NC Check-Ins 2.0 Test Specifications

Interim A	Interim B	Interim C
NC.8.NS.1	NC.8.EE.7	NC.8.EE.8
NC.8.EE.1	NC.8.F.3	NC.8.F.2
NC.8.EE.7	NC.8.F.4	NC.8.SP.1
NC.8.F.1	NC.8.F.5	NC.8.SP.2
NC.8.G.3	NC.8.G.5	NC.8.SP.3

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IV-27: Webinar Presentation (September 30, 2021)

We will begin shortly.

You are currently NOT muted.

Please mute yourself. There will be opportunities during the WebEx to provide feedback.

North Carolina's Innovative Assessment Pilot
2021–22

September 30, 2021

Housekeeping

- Today's WebEx <u>will be</u> recorded. The recording will be posted on TNN tomorrow. This recording <u>can be</u> shared with others.

Technical Issues? Questions?

- Please use the **Q&A feature** to ask questions.
  - We will collect questions throughout and will address as many as we can at the end.
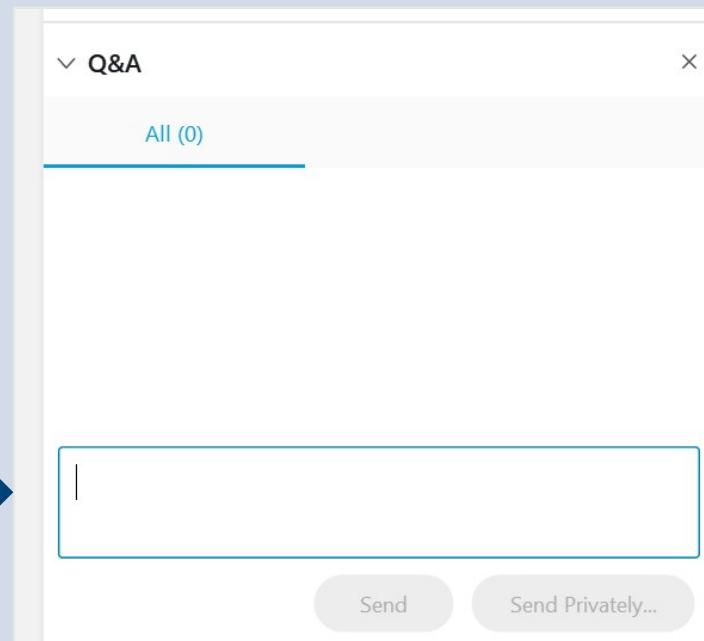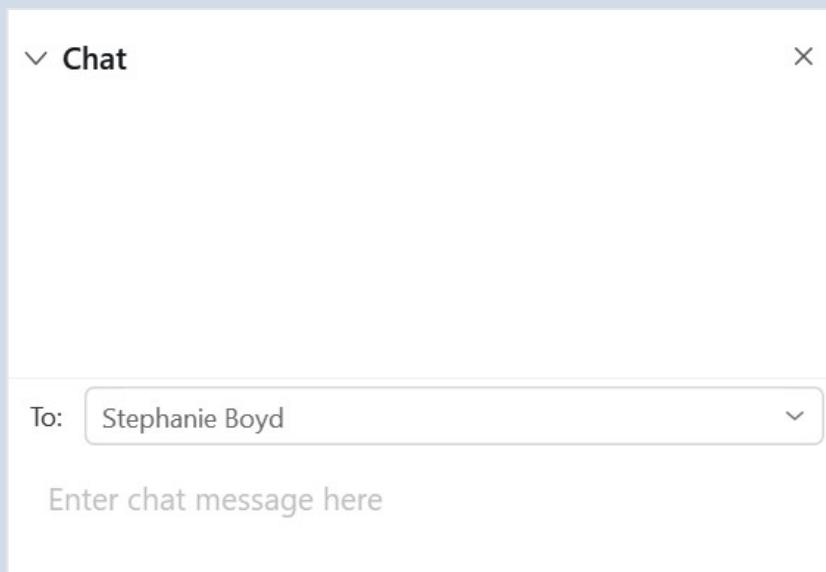
- For technical difficulties, send a <u>private</u> chat to Stephanie Boyd.

Welcome and Introduction

NCDPI Accountability Services

Tammy Howard, Ph.D.
Director of Accountability Services

Kinge Mbella, Ph.D.
Lead Psychometrician

Maxey Moore
Section Chief, Test Development

Shannon Jordan
Section Chief, Testing Policy and Operations

Design

Research Study

- The NCPAT is a pilot program until North Carolina has evidence and receives approval that the system meets all technical requirements.

- During this pilot phase there will be adjustments to the current design primarily based on:

  – feedback from all stakeholders

  – data review and evidence from technical experts

- Innovation is a continuous process of change.

  – North Carolina is committed to systematic transformation of assessment to best support instruction.

Purpose

- The current design purposes of the North Carolina Personalized Assessment Tool are to:

    – provide educators, students, and stakeholders with immediate and detailed feedback on student performance on grade-level-specific content standards so classroom instruction may be tailored to individual student's needs;

    – provide a progress indicator for each interim on individual student performance in relation to overall grade level performance expectation; and

    – provide a reliable estimate to inform a student's summative assessment experience.

Considering Innovation within Statewide Summative Assessment

- NCDPI's proposed assessment system for the Innovative Assessment Demonstration Authority (IADA) will:
    - Meet federal requirements for fairness, validity, and reliability
    - Assess grade-level content standards
    - Incorporate interim assessments that provide through-year data on student performance for selected content standards
    - Provide formative student-level and class-level reports for parents and teachers

North Carolina Personalized Assessment Tool

NC Personalized Assessment Tool

NC Interims

Flexible Summative
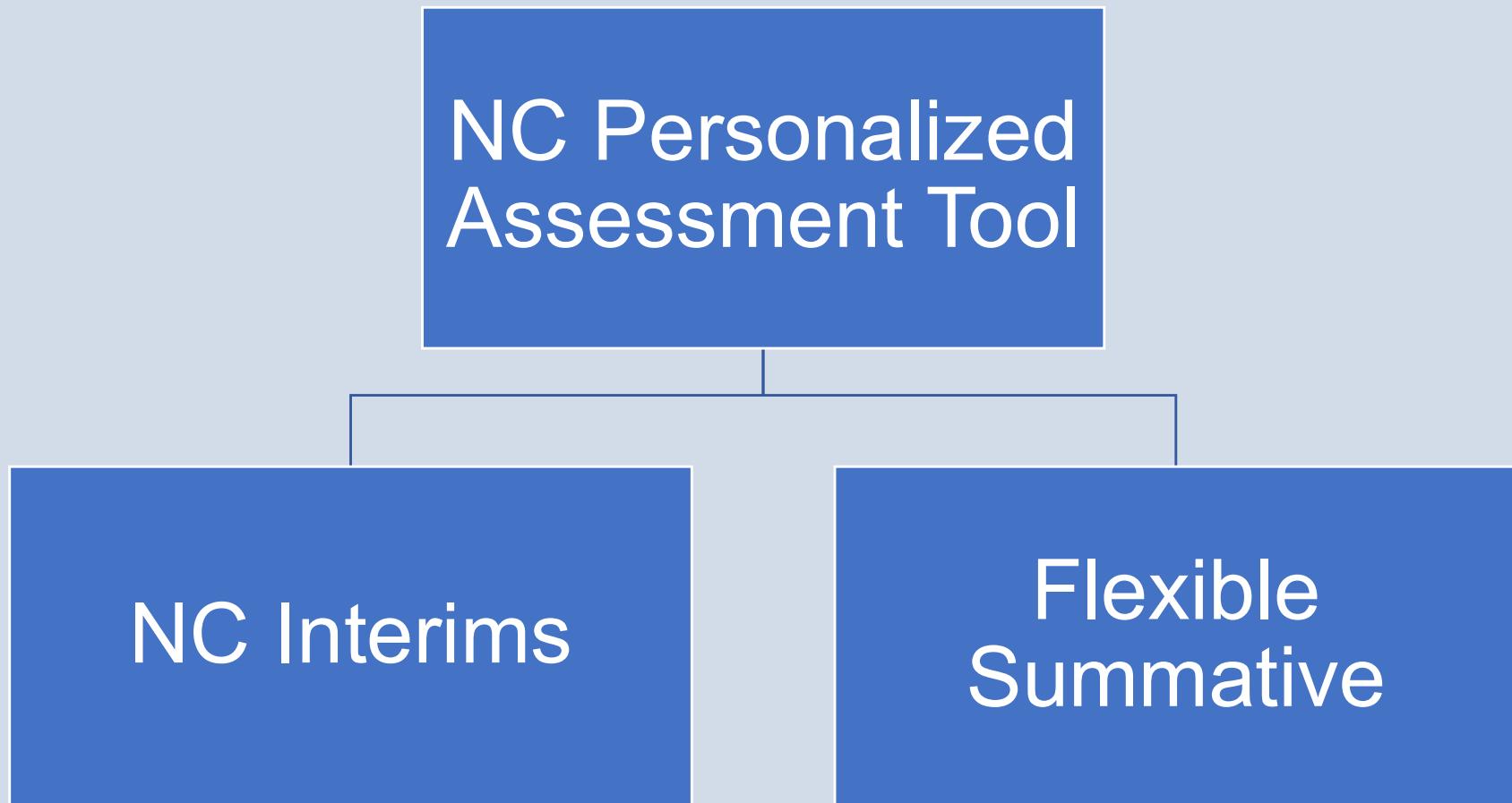
NCPAT System

NC Interims	Flexible Summative
• Three interim assessments available to districts and schools to provide formative feedback.	• Multistaged-fixed adaptive forms designed to provide optimal measurement precision along the entire grade level scale.
• Single flexible interim administration window and administering interims in any order to accommodate for local curriculum.	• Flexible test experience for students based on information gathered from NC Interims throughout the year.
• Updated dynamic formative reports for teachers and students.	• Flexible summative will sample a broader range of grade-level content standards without need to increase test length.
• Interims will provide an estimate of student's grade level performance expectation.	• Flexible summative will be on the same scale as the End-of-Grade tests.
• Interim data will be used to inform most appropriate summative form for each student.	• All flexible summative forms will ensure reliable estimate of student achievement levels.

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Q & A

Questions on the NCPAT design

Logistics

Pilot Timeline

Year	Development Activity
2019–20	Item Development
2020–21	Test Specifications, Item Development, and Professional Development
2021–22	Administer Grades 4 and 7 Mathematics and Reading NC Interims Only
2022–23*	Administer Grades 4, 5, 7, and 8 Mathematics and Reading Unified Interim System and Flexible Summative
2023–24	Administer Grades 3–8 Mathematics and Reading NC Interims and Flexible Summative

*Possible addition of Grades 5 and 8 Science with standards adoption in June 2022
   Field testing in 2022–23, 2023–24 administration

Transition Availability

	2021–22	2022–23	2023–24*
Pilot Schools	Grades 4 and 7 Mathematics and Reading • NC Interims • EOGs Grades 3, 5, 6, and 8 Mathematics, Reading and Science • NC Check-Ins • EOGs	Grades 4, 5, 7, and 8 Mathematics and Reading • Unified Interim System • Flexible Summative Grades 3 and 6 Mathematics, Reading, and Science • NC Check-Ins • EOGs	*Grades 3–8 Mathematics and Reading (Possibly Science Grades 5 and 8)* • Unified Interim System • Flexible Summative
All other NC Schools	Grades 3–8 Mathematics and Reading • NC Check-Ins • EOGs	Grades 3–8 Mathematics and Reading • NC Check-Ins (grades 3 and 6) • Unified Interim System (grades 4, 5, 7, and 8) • EOGs	

*Outcomes of study will affirm feasibility of statewide implementation in 2023-24

Feedback Requested

- What should we call the new unified interim?

2021–22 Mathematics NC Interims

- Grades 4 and 7 mathematics
  - Interim specifications for 2021–22 have been developed with feedback from teachers across the state. The groupings of standards on these interims differs from those used on the NC Check-Ins.

- Format
  - 25 items
  - Item types include four-option multiple-choice items, open-ended numeric entry items, and technology-enhanced items.
  - Calculator active and inactive sections
  - Suggested time of 90 minutes

2021–22 Reading NC Interims

- Grades 4 and 7 Reading
- Format:
  - 24 items
    - Grade 4: multiple-choice
    - Grade 7: multiple-choice and technology-enhanced
  - 3 reading selections, including distinct selection types (Informational, Literature, or Poetry)
  - For each selection, there will be 6 to 9 four-option multiple-choice items or technology-enhanced items.
  - Suggested time of 90 minutes.

Interim Reporting Feedback

North Carolina Individual Student Report 2021-22

Grade 4 Math | NC Interim 1

North Carolina Department of
PUBLIC INSTRUCTION

Student ID: 0123456789
Student Name: JANE DOE

Process Date:
School Name: East Elementary

Recently, your student took an NC Interim in mathematics. This report provides information on your student's progress in learning grade 4 mathematics. At this time, your student's progress is indicated as ranging from Approaching to Satisfactory. Your student's teacher will use this information to address learning needs for the remainder of the school year.

Approaching- The student is beginning to understand these concepts; more support is needed.
Satisfactory- The student has a satisfactory understanding of these concepts.

Note: The blue circle shows how the student is progressing on each learning concept.
For more information regarding these standards, please visit https://dpi.nc.gov/media/4007/open

Math Learning Concepts Tested	Progress on Learning Concepts
Operations and Algebraic Thinking Students can: • Multiply and divide using models and equations • Understand the difference between how many more and how many times more	Approaching — Satisfactory
Numbers and Operations in Base Ten Students can: • Read, write, and break apart multi-digit numbers (up to 100,000)	Approaching — Satisfactory
Numbers and Operations in Base Ten Students can: • Solve multi-digit addition and subtraction problems (up to 100,000)	Approaching — Satisfactory
Numbers and Operations in Base Ten Students can: • Use >, <, and = symbols when comparing multi-digit numbers (up to 100,000)	Approaching — Satisfactory
Geometry, Measurement and Data Students can: • Classify lines and angles • Work with area and perimeter, including word problems	Approaching — Satisfactory

Interim Reporting Feedback

North Carolina Individual Student Report 2021-22
Grade 7 Reading | NC Interim 3

North Carolina Department of
PUBLIC INSTRUCTION

Student ID: 0123456789
Student Name: JANE DOE

Process Date:
School Name: East Elementary

Recently, your student took an NC Interim in reading. This report provides information on your student's progress in learning grade 4 reading. At this time, your student's progress is indicated as ranging from Approaching to Satisfactory. Your student's teacher will use this information to address learning needs for the remainder of the school year.

Approaching- The student is beginning to understand these concepts; more support is needed.
Satisfactory- The student has a satisfactory understanding of these concepts.

Note: The blue circle shows how the student is progressing on each academic indicator.
For more information regarding these standards, please visit https://www.dpi.nc.gov/media/7228/open.

Reading Learning Concepts Tested	Progress on Learning Concepts
Key Ideas and Evidence After reading a text, students can: • Cite several pieces of evidence to support conclusions • Determine the theme of two or more central ideas • Provide an objective summary • Analyze interactions (particular literary elements, individuals, events and ideas)	Approaching ⬤ Satisfactory
Craft and Structure After reading a text, students can: • Explain how the form or structure of a text contributes to its meaning • Analyze the text's structure (how paragraphs/sections relate to each other, contribute to the whole text, and to the development of ideas) • Analyze how an author develops or contrasts the perspectives of different characters • Determine an author's point of view or purpose in a text	Approaching ⬤ Satisfactory
Integration of Ideas and Analysis After reading a text, students can: • Evaluate whether the textual evidence is relevant (important) and sufficient (adequate)	Approaching ⬤ Satisfactory
Vocabulary Acquisition and Use Students can: • Determine the meaning of grade-level words and phrases using context clues and word relationships • Explain the meaning of figurative language and nuances (subtle differences) in word meanings that are suitable for grade 7	Approaching ⬤ Satisfactory

Feedback Requested

- Do you have any feedback on the new ISR?

ISR Availability

- Processing interim test data in a new system requires tests to be administered before the quality assurance review can begin

- ISRs will be available once the quality assurance process is complete, and the data processing is verified

NC Interims and Local Control

- **Interim Administration:**
  - Single or multi-day administration
  - In-person (preferred) or remote administration option
  - Allows for local pacing decisions as PSUs determine order of interim delivery within the single window

- **Interim Administration and Review Period:**
  - October 1–May 31

2021–22 NC Interim Administrations

- **Eligibility:** (2021–22) Pilot school students following the NC *Standard Course of Study* and enrolled in grades 4 and 7 mathematics and reading.

- **Online administration:** *Only* available online. Accommodations available for students who cannot access the online system and the accessibility need is documented in an IEP or 504 Plan.

  - No misadministration form

  - No sample questions

- **Number of NC Interims:** Three reading and three math interims at grades 4 and 7.

Professional Development

- **Online Professional Development**

    – Audience: Teachers, Coaches, Principals and Directors

    – Format: self-paced, pre-recorded workshops on analyzing and applying formative classroom data collected from NC Interims administrations

    – Availability: 2021-22 school year (pilot schools)

Communication updates in regional meetings

Next Steps

- Implement professional development courses
- Item development and embedded field test administration
  - NC is recruiting new item writers
  - bit.ly/WriteForNC
- Administer NC Interims and analyze data
- Develop NC Interims and Flexible Summative for the 2022–23 school year

Comment:
Expanded item writing and reviewing opportunities pathway:

https://docs.google.com/forms/d/e/1FAIpQLSdB9KfOKPI4Fz8SlIRkq0xH4XxrJWX_qhUduMPKxJqdIySdEg/closedform

Test Specification Surveys for Mathematics Unified Interim System

- **Starting in 2022–23, NC will have one unified interim system**

  - All PSUs will be given the opportunity to provide feedback for grades 3–8 mathematics interims this fall

  - Each PSU should submit 1 survey response

- Two questions will be asked for each standard:

  - *How important is it for teacher to receive formative assessment data on this standard?*

  - *During which quarter do you completely finish teaching this standard?*

Feedback Requested

- The mathematic interims are available any time during the window, does that resolve any pacing issues?

Q & A

Any questions for 2021–22?

2022–23

Flexible Summative (Piloting 2022–23)

- **Flexible Summative Administration:**

  – Following EOG administration policies

  – In-person only

- **Data:**

  – Same scale as the EOG

  – Same reporting as the EOG-level

    – Classroom reporting and Individual Student Report

  – Used for accountability purposes

- **Administration Window:**

  – Last ten days

Q & A

Any further questions?

IV-28: September Webinar Audience Questions and Feedback

Q&A Session for Fall 2021 Innovative Assessment Demonstration Authority (IADA) Update webinar

Session number: 24390204411

Date: Thursday, September 30, 2021

Starting time: 1:36 PM

Question: NC Check-Ins or NC Interims?

Q: NC Check-ins because of familiarity

Q: NC Interims

Priority: N/A

Q: Definitely leave the name "NC Check-Ins" in the past....

Q: I suggest Interims so that schools can keep them seperate in their minds.

Q: agree NC Interim

Q: I think calling them interims would help people not carry over any preconceived notions or impressions from the check-ins.

Q: If they are going to be required, I would change the name. Especially since Check Ins have been optional in the past.

Q: NC Interim

Individual Student Report Feedback

Q: The new report looks more family-friendly and growth-mindset oriented.

Q: It would depend on how the interim questions are chunked within each of the Interims as to whether administering in any order would resolve pacing.

Q: It resolved the pacing issues for us with the exception of 2-3 standards.

Q: Will Lexiles and Quantiles be on the reports?

Q: Will the interim assessments be available for teachers to review like the NC Check-Ins are currently?

IV-29: Webinar Presentation (March 7, 2022)

Spring 2022 Innovative Assessment Demonstration Authority (IADA) Update

March 7, 2022

Housekeeping

- Welcome!

- The purpose of today's webinar is to provide an update of North Carolina's Innovative Assessment Pilot.

- Today's webinar will be recorded and posted to TNN.

Technical Issues?

- For technical difficulties, send a <u>private</u> chat to Stephanie Boyd.
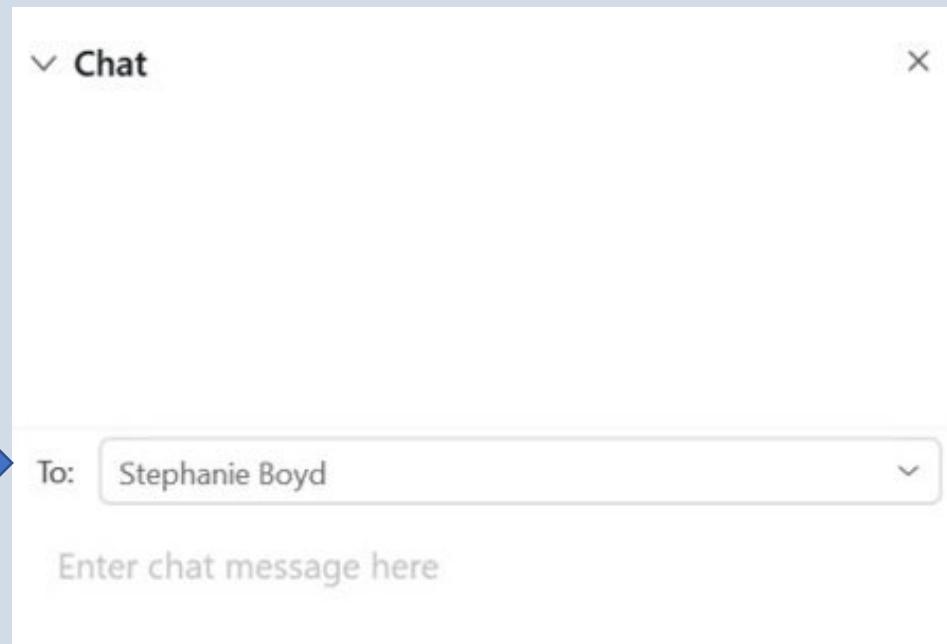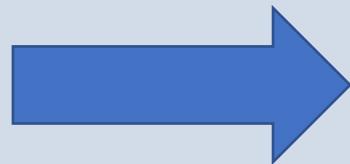
Padlet Questions

Add questions or comments you have during the presentation into the Padlet:

https://bit.ly/Spring2022IADAQuestions
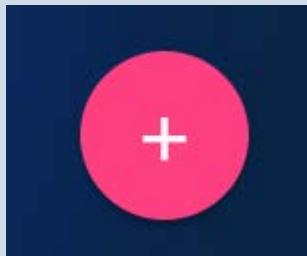
Add a question to the padlet by clicking on the pink circle icon

Padlet Questions

- Enter your question in the pop-up window
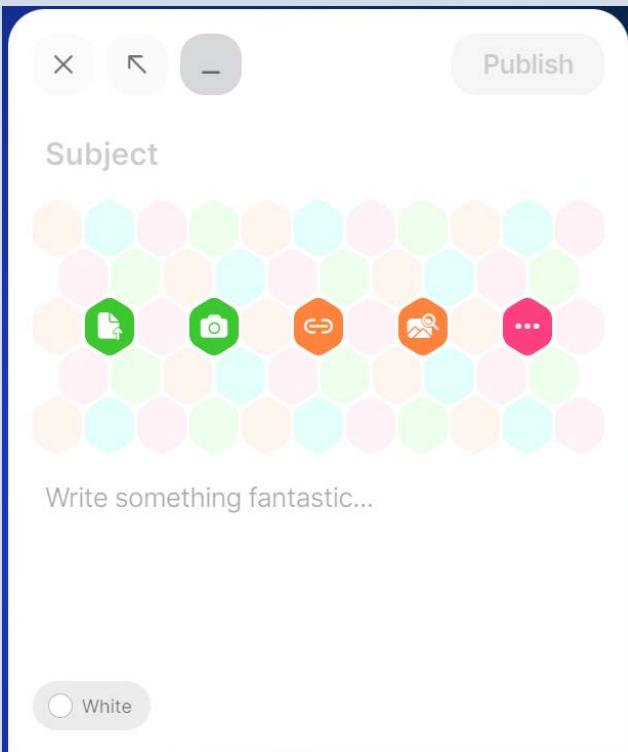
- You may also respond to other questions by
  - Liking the question or comment (heart icon)
  - Adding your comment
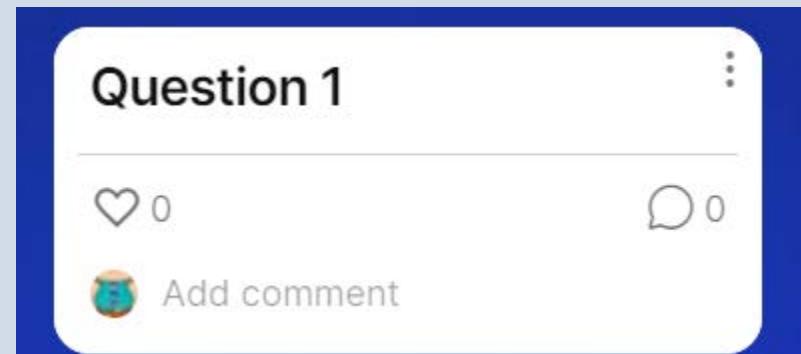
Welcome and Introductions

NCDPI Accountability Services

Tammy Howard, Ph.D.
Director, Accountability Services

Kinge Mbella, Ph.D.
Lead Psychometrician

Shannon Jordan
Section Chief, Testing Policy and Operations

Maxey Moore
Section Chief, Test Development

North Carolina Department of
PUBLIC INSTRUCTION

Agenda

- NC Personalized Assessment Tool Components

- Timeline and Transition

- Specifications and Individual Student Reports

- Operations, Partnerships, and Stakeholder Input

- Pilot Volunteers

North Carolina Personalized Assessment Tool

NC Personalized Assessment Tool

NC Check-Ins 2.0 (2022–23)

Flexible Summative

NC Check-Ins 2.0 Design

- Designed for online administration

- Three per content area/grade level

- Available for classroom use throughout the school year

- Provide formative feedback data for instructional uses

- May provide a progress indicator for each student in relation to grade-level performance standards

Multistage Fixed Adaptive Summative Design

Multistage Fixed Adaptive Summative Forms

EOG Flexible Summative Forms

Common Set

+

Targeted Set (*Informed by data from Interims*)

→ Common EOG Achievement Level Scale
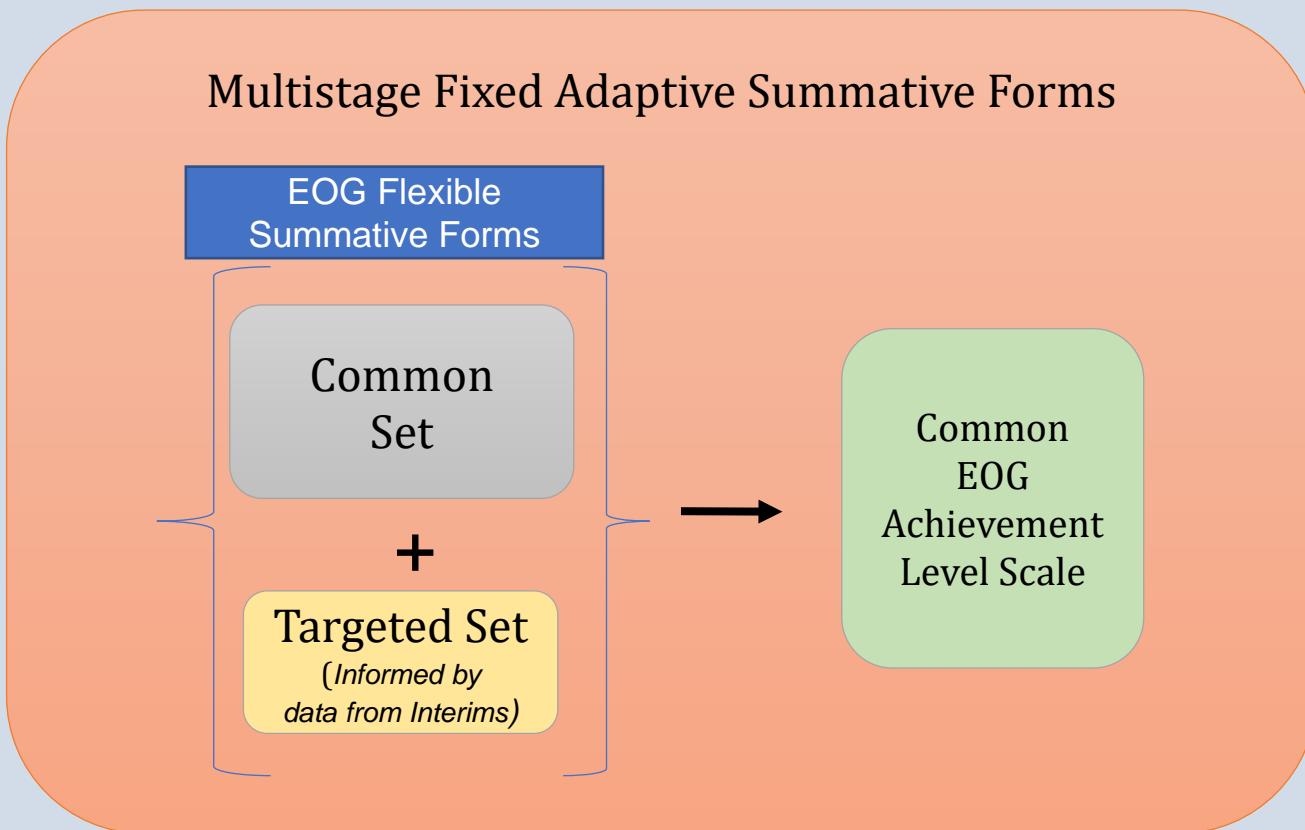
Timeline and Transition

NCPAT Timeline

Grade Level	Year 1 2019–20	Year 2 2020–21	Year 3 2021–22	Year 4 2022–23	Year 5 2023–24
3					Statewide*
4		Delayed	Pilot	Pilot	Statewide*
5				Pilot	Statewide*
6					Statewide*
7		Delayed	Pilot	Pilot	Statewide*
8				Pilot	Statewide*

*Outcomes of study will affirm feasibility of statewide implementation in 2023–24 for mathematics and reading.

Transition Availability

	2021–22	2022–23	2023–24
Pilot Schools	Grades 4 and 7 • NC Interims • EOGs Grades 3, 5, 6, and 8 • NC Check-Ins • EOGs	Grades 4 and 7 • NC Check-Ins 2.0 • Flexible Summative Grades 5 and 8 • NC Check-Ins 2.0 • EOGs Grades 3 and 6 • NC Check-Ins • EOGs	Grades 4, 5, 7, and 8 • NC Check-Ins 2.0 • Flexible Summative Grades 3 and 6 • NC Check-Ins 2.0 • To Be Determined
All Other Schools	Grades 3–8 • NC Check-Ins • EOGs	Grades 4, 5, 7, and 8 • NC Check-Ins 2.0 • EOGs Grades 3 and 6 • NC Check-Ins • EOGs	Grades 3–8 • NC Check-Ins 2.0 • To Be Determined

NC Check-Ins	NC Check-Ins 2.0
Purpose: provide formative feedback	Purpose: provide formative feedback, inform starting point on flexible summative, progress indicator
Mathematics: retired content specifications	Mathematics: new content specifications (3 domains/ 5+ standards)
Reading: text complexity increases across forms	Reading: text complexity is consistent across forms
WinScan reporting and NC Test Admin reporting	NCTest Admin reporting
Multiple-choice items and numeric entry	Includes technology-enhanced items
ISRs: quantitative reporting	ISRs: qualitative reporting

Specifications and Individual Student Reports

2022–23 Mathematics NC Check-Ins 2.0

- **[Content specifications are posted on webpage.](#)**

- **Format**

  - 25 items

  - Item types include four-option multiple-choice items, open-ended numeric entry items, and technology-enhanced items

  - Calculator active and inactive sections

  - Suggested time of 90 minutes

North Carolina Individual Student Report 2021-22

Grade 4 Math | NC Interim 1

North Carolina Department of **PUBLIC INSTRUCTION**

Student ID: 0123456789
Student Name: JANE DOE

Process Date:
School Name: East Elementary

Recently, your student took an NC Interim in mathematics. This report provides information on your student's progress in learning grade 4 mathematics. At this time, your student's progress is indicated as ranging from Approaching to Satisfactory. Your student's teacher will use this information to address learning needs for the remainder of the school year.

Approaching- The student is beginning to understand these concepts; more support is needed.
Satisfactory- The student has a satisfactory understanding of these concepts.

Note: The blue circle shows how the student is progressing on each learning concept.
For more information regarding these concepts, please visit https://www.dpi.nc.gov/media/4007/open.

Math Learning Concepts Tested	Progress on Learning Concepts
Operations and Algebraic Thinking Students can: • Multiply and divide using models and equations • Understand the difference between how many more and how many times more	Approaching ———●——— Satisfactory
Numbers and Operations in Base Ten Students can: • Read, write, and break apart multi-digit numbers (up to 100,000)	Approaching ————●—— Satisfactory
Numbers and Operations in Base Ten Students can: • Solve multi-digit addition and subtraction problems (up to 100,000)	Approaching ——●———— Satisfactory
Numbers and Operations in Base Ten Students can: • Use >, <, and = symbols when comparing multi-digit numbers (up to 100,000)	Approaching ————●—— Satisfactory
Geometry, Measurement and Data Students can: • Classify lines and angles • Work with area and perimeter; including word problems	Approaching ——●———— Satisfactory

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2022–23 Reading NC Check-Ins 2.0

- **[Content specifications are posted on webpage.](#)**

- **Format**
  - 24 items
    - multiple-choice and technology-enhanced
  - 3 reading selections, including distinct selection types (Informational, Literature, or Poetry)
  - For each selection, there will be 6 to 9 four-option multiple-choice items or technology-enhanced items
  - Suggested time of 90 minutes

North Carolina Individual Student Report 2021-22
Grade 7 Reading | NC Interim 1

North Carolina Department of PUBLIC INSTRUCTION

Student ID: 0123456789
Student Name: JANE DOE

Process Date:
School Name: East Elementary

Recently, your student took an NC Interim in reading. This report provides information on your student's progress in learning grade 7 reading. At this time, your student's progress is indicated as ranging from Approaching to Satisfactory. Your student's teacher will use this information to address learning needs for the remainder of the school year.

Approaching- The student is beginning to understand these concepts; more support is needed.
Satisfactory- The student has a satisfactory understanding of these concepts.

Note: The blue circle shows how the student is progressing on each academic indicator.
For more information regarding these concepts, please visit https://www.dpi.nc.gov/media/7228/open.

Reading Learning Concepts Tested	Progress on Learning Concepts
Key Ideas and Evidence After reading a text, students can: • Cite several pieces of evidence to support conclusions • Draw inferences about ideas, events, and actions • Provide an objective summary • Analyze how the theme or central ideas develop • Analyze interactions (particular literary elements, individuals, events, and ideas)	Approaching ● Satisfactory
Craft and Structure After reading a text, students can: • Interpret meanings of words and phrases • Explain how the form or structure of a text contributes to its meaning • Analyze how an author develops or contrasts the perspectives of different characters • Determine an author's point of view or purpose in a text • Analyze how authors distinguish their position from others	Approaching ● Satisfactory
Integration of Ideas and Analysis After reading a text, students can: • Trace and evaluate the argument and specific claims • Evaluate whether the textual evidence is relevant (important) and sufficient (adequate)	Approaching ● Satisfactory
Vocabulary Acquisition and Use Students can: • Determine the meaning of grade-level words and phrases using context clues and word relationships • Explain the meaning of figurative language and nuances (subtle differences) in word meanings that are suitable for grade 7	Approaching ● Satisfactory

Operations, Partnerships, and Stakeholder Input

NC Check-Ins 2.0 Administration

- Single or multi-day

- In-person

- Accommodates local pacing decisions as PSUs determine order of interim delivery at any point within the single window

- Administration and Review Period

    - October 1–May 31

Partnership with the Friday Institute

- **Fall 2021**

  – Cognitive labs conducted to collect information about technology-enhanced item types at grades 3–5

- **Spring 2022**

  – Cognitive labs conducted to collect information about paper item types for students who cannot access a computer

  – Focus groups with teachers to discuss item types and using reports to guide instruction

  – Two training courses

Courses

- Two training courses will be available at the beginning of the 2022–23 school year.

- Both courses are optional, and it is a local decision as to how they are used.

- The first course is available to pilot schools March 7, 2022, and is 30-minutes long.

- Available July 2022, and is 10-hours long. This course has been broken into small sections for manageability.

- Course Competencies
  - Introduce participants in the purposes of the *NC Interims* and how they can be used to support learning as formative classroom resources.

  - Develop understanding of how to use and interpret two main reports from *NC Interims*, specifically the *Individual Student Report* (ISR) and the *Class Item Report* (CIR).

Course Two: *Three A's (Assessment, Analysis, Action) of Data... Increasing Achievement One Student at a Time*

- Course Competencies
  - Immerse participants in the use of data literacy and develop an understanding of how utilizing data in assessments is integral to K–12 teaching and learning to increase student achievement;
  - Identify and explore best practices in data-driven decision making as identified within research-based strategies;
  - Empower educators (or teacher leaders) to create a positive culture where change can best be understood and embraced by students and parents; and;
  - Invite educators to interact and collaborate with peers who are implementing interim assessments, such as *NC Interims*, into classroom instruction by creating a professional learning network.

Stakeholder Input

- Critical to this process
  - Public School Units (PSUs) and Schools
  - Teacher Leadership Council
  - Testing and Growth Advisory
  - Configuration Control Board (group of testing and accountability leaders that provides input to the Division of Accountability Services on stakeholder issues)
  - North Carolina Technical Advisors
  - NCDPI staff members

Pilot Volunteers

North Carolina Department of
PUBLIC INSTRUCTION

Pilot Volunteers

- Initial application to USED had two districts and one charter school (fall 2019)

- In the 2020–21 school year, there were 180 schools, 14 districts and 8 charter schools

- For the 2021–22 school year, there are 58 schools, ten districts and 6 charter schools
  - Also, Cherokee Central Schools

Pilot Volunteers

- For the 2022–23 school year, pilot volunteer schools will participate in the NC Check-Ins 2.0 and the flexible summative assessment

    – The participating students will not take the current end-of-grade assessment

    – The flexible summative assessment is comparable to the current end-of-grade assessment

        ▪ Students who take one will not have an advantage over students who take the other

        ▪ The study requirement from the U.S. Department of Education is the innovative assessment must be comparable

Pilot Volunteers

- Benefits of volunteering

  – Provide feedback on the development of the NC Check-Ins 2.0 and the flexible summative assessment

  – Provide students with an innovative testing experience

Participation Volunteers

- If interested in joining the pilot in 2022–23, please email Iris.Irving@dpi.nc.gov.

- For all schools participating in the pilot for the 2022–23 school year, a letter of support will be requested in July 2022.

Questions

IV-30: March Webinar Audience Questions

Spring 2022 IADA Update Webinar: Questions

March 7, 2022

IRISIRVING   FEB 22, 2022 08:16PM

Is it possible to take the questions from the padlet and provide a Q&A handout….it is getting a bit confusing

Will questions not answered due to time be answered and sent out?

Transfer students?

If a student takes 2 Check-In 2.0 at different schools (possibly in different districts), will this allow them to have flexible summative? I want to know if testing at different schools/different districts will follow the student.

Mandatory vs. Optional

Can you reiterate one more time if/when the Check-ins 2.0 and flexible summative will be required?

More information about the Flexible Summative

Will the flexible summative be a form that has less items or the same number of items as traditional EOGs, but with a more targeted difficulty level? If the item number varies on the flexible summative, how will that impact grouping students for testing?

Flexible Summative vs EOG

How will the Flexible Summative differ from the current EOGs with regards to number of test items, time for testing, retesting, and any other testing parameters we are accustomed to with the EOG.

The targeted portion of the flexible summative. How does it differ from current EOG?

Local Resources

We have spent a great deal of funds for reading and mathematics diagnostic assessments ….and developed pacing guides.

How will this 2.0 provide more information then, what many districts have already invested in resources?

Are the terms NCPAT and NCCI 2.0 interchangeable?

> NCCI2.0 is one piece of the NCPAT. THe other piece is the EOY flexible summative   — ANONYMOUS

Training Courses

Are the training courses available only to Pilot schools or to everyone? (the 30 min course and 10 hour course)

CONNECTION WITH EOG

How will users know based on 2.0 …..the outcome or starting point on EOGs?

EOG/Flex Sum

If a school has the whole grade level taking the Flexible Summative this year but have students at the end of the year that don't have two interims assessments they will have to take the EOG. Will these students be able to take the test together or in two different sessions?

Check In 2.0

Will teachers have access to Check In 2.0 assessments after administration to support the analysis and action planning process?

Can you give us an explanation of the flexible summative test and how it differs from regular summative tests currently being used in NC public schools?

Determining - EOG outcome

Will the NCCHECKINS 2.0 -- equate to a passing achievement level?? How will we know if students will be proficient on EOGs if only take two out of three benchmarks?

Optional yet Flexible Summ tied to NCCI2.0?

Please clarify if the year-end flexible summative is tied to the 3 NCCI-2.0s. If the check-ins are tied, yet optional, how does that affect the flexible summative?

If schools do not participate in NC Check in 2.0 once the flexible assessment is required, how will that assessment be flexible without prior Check in data.

Flexible Assessment

If student takes one Check-in 2.0 in one district and another one in a different district, will they be eligible to the flexible assessment? IS it 2 in one district?

I thought it was mentioned that students need to take 2 check-ins to take the flexible assessment?

What if a student does not take two Check Ins 2.0 during the year? What will the flexible assessment look like for that student?

Remote Testing

Did I understand correctly that the Check-Ins 2.0 cannot be administered remotely, like the current Check-Ins?

Optional forever... or just during the transition period?

What improvements have been made to NC Test Reporting? Currently, it's not great. Can we expect improvments gong forward? Specifically being able to generate district level reports for interims?

Instructional support and Interpretation

Can a role be created for building level instructional coaches to see assessment data to support teachers using this data to support their instruction and data analysis?

Flexible summative

Your slide towards the beginning suggested that flexible summative testing would only be an option for gr 4 and 7, but slide 29 stated that students would only do flexible summative NOT the EOG. Is this statement just for gr 4 and 7 or 5 and 8 as well?

2022-23

Can you provide a simple breakdown of what options school districts have for participating in testing (pilot or otherwise) for the 2022-23 school year?

Can we choose schools for the pilot or must it be district wide?

Would schools have access to the content as it will be listed on the ISRs prior to the test administration for consistent language & communication with teachers, students, and families?

Struggling with the "WHY"

What is the overall purpose of moving in this direction? Specifically with the mathematics not being taught across the state in a particular manner.

What is the why??

Can any district be a Pilot School in 2022-23 or only those that are the schools who participated this year?

Would schools have access to the content as it will be listed on the ISRs prior to the test administration for consistent language communication with teachers, students, and families?

Remediation/Re-administration

Will students who are not proficient have the opportunity for remediation and re-administration like the students that take the regular EOG test?

Reports

The reports in NC Test Admin are hard to follow and print at the district level. We need more flexibility with options: ex - by semester, school report vs teacher report, need the ability to see the subscore summary for district and each school by semester (if HS)

We need district reports! — **ANONYMOUS**

Definitly need district Level reports and access for all school - based staff... not just teacher of record — **ANONYMOUS**

EVAAS Data

Please plan to have something in place to explain to schools/teachers/stakeholders about the difference in testing and how it does or does not impact growth ratings in EVAAS.

Feedback from PSUs about NC Test Admin functionality

Is there a group that is giving feedback on NC Test Admin functions? I feel like this is being overlooked and there are issues. I am afraid this will cause the Check-in 2.0 testing to be difficult and frustrating. The field has concerns and need to be addressed prior to the September state-wide meeting.

Impact on Accountability Scores

Need more information about the potential overall impact on school accountability model....still concerns over no state pacing guide, especially with the survey taken regarding mathematics and how 'None' of us are inline with the pacing of the state math breakdown

ISRs...optional or required?

Will we be required to provide ISRs to families or will they still be optional?

NC Education/NCTest Admin

We need a new role created (other than teacher or school TC) for additional staff that need access to reporting. (EL, AIG, principals, etc.)

Is this already a done deal?

Seems some of the 'improvements' with NCTEST ....are making things a bit more complicated for those actually in the field using the product

Facilitator Access

Will Check-Ins 2.0 have a facilitator access for those district and school-level support facilitators, coaches, etc. who are expected to review data with teachers in PLCs to view the check-ins during the review period? The current check-ins only permit the teachers associated with the course in PowerSchool and the STC to view the check-ins for review.

unfortunately, the process allows any teacher associated with course to access even if they are not administering .... — **ANONYMOUS**

Using the STC role gives folks access to other things that they don't need associated with NC Education/Test — **ANONYMOUS**

WinScan v NCAdmin

Will we get scan file through WinScan for matching or will that be handled though NCAdmin in addition to the reporting?

> *Great question. How will this affect accountability reporting?*
> — ANONYMOUS

> *Our district exports all the information from winscan to other district applications. Will those be available?* — ANONYMOUS

NCPAT Courses

Are these courses available for non-pilot districts?

> *Actually the "NCPAT Training course and 3 A's of data" course*
> — ANONYMOUS

SECURITY CONCERNS

Concerns regarding security regarding this entire process. Will this be locked down and only available for those administering these assessments?? Right now, every checkin is open and available to anyone with a NCTEST account....really concerning to move forward without addressing this

> *The current set up is a nightmare. It needs to be better organized!* — ANONYMOUS

> *Agreed -- and printing from NCTEST is awful....too time consuming....* — ANONYMOUS

Remote Access for Check-Ins 2.0

The slide stated that the check-ins would be in-person. Will there be a remote access code available for students learning remoted in virtual academies in Check-Ins 2.0 as there is for the current check-ins?

"IF" the pilot is successful

What are the criteria for the pilot to be successful? So it is possible this would be delayed or not implemented? If so, when?

NC Test Admin security rights

Will we be able to change rights with admins regarding reports? Right now rights are also tied to OTISS access and email notifications.
Would like to designate what reports staff can see who are not

teachers or principals.

Will the new Check-Ins 2.0 for NC Math 3 have calculator in active items, as well as the Calculator Active items since the NC Math 3 EOC only has Calculator Active items?

why doesn't text complexity increase in NCCI 2.0 like it did in the original?

NC Check-in 2.0 Data

Will we be able to get raw data with NC Check-in 2.0?

Will the flexible summative tests still be 20% of the student's grade?

State pacing guides

With 2.0 -- and the connection to the summative EOG -- will state pacing guides be provided

Progress Indicator

Very curious as to how the progress indicator will be calculated. Won't the standard vary by NC Check-in?

Progress Indicator

What is meant by progress indicator?

> *A sliding scale bar will not provide the reporting components that support instructional purposes and parent understanding. This will lead to more confusion rather than understanding.*
> — ANONYMOUS

What does it mean for schools that do not use NC Checkins but use iReady?

> *Or any other benchmarking system* — ANONYMOUS

Requirement? Optional

NCCHECKINS 2.0 - required for all? optional?

Start Date

Will the new NC Check-Ins for English II and Math 3 be available at the start of the school year or will they be brought online later in the year?

Tell me more about the "Progress Indicator."

Is there a possibility that Check -ins 2.0 will be required for all schools?

22-23

If we use NC Check-Ins, then we'll *have* to use version 2.0 next year for 4, 5, 7, and 8 in Reading and Math - correct?

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IV-31: North Carolina Personalized Assessment Tool Training Course Survey Summary

Understanding Reports | NC Check-Ins 2.0

End-of-Module Survey Feedback

Prepared by Kevin Winn, Ph.D. and Rebekah Davis, Ph.D.
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Overview

To help educators prepare for the NC Check-Ins 2.0, pilot schools in the North Carolina Personalized Assessment Tool (NCPAT) program administered the 30-minute, *Understanding Reports*, training module. This professional development module was created through a partnership between the North Carolina Department of Public Instruction and the Friday Institute for Educational Innovation to help educators understand the class item report and individual student report. As a part of the ongoing evaluation, participants responded to a short survey at the end of the module.

Sixty-six representatives from 17 school districts and 10 charter schools completed the survey. Of those, 42 (64%) were administrators, 16 (24%) were teachers, and eight (12%) were coaches. Slightly less than half (47%) of respondents reported taking the training as a requirement. Many who voluntarily completed the training reported being curious about the new assessments, and they wanted to see what they would need to know for the future statewide rollout of the NCPAT.

Closed-Ended Survey Results

Teachers consistently rated the course higher than administrators and coaches. Responses included 100% of teachers agreeing that they had a better understanding of (1) how Check-Ins data might be used to inform instruction, (2) how they might interpret results in the class item reports, and (3) how to use the individual student reports to interpret student data. Further, all respondents agreed the training was relevant to their professional needs.

	Teachers Strongly Agree and Agree	Administrators Strongly Agree and Agree	Coaches Strongly Agree and Agree
As a result of my completion of this training, I have a better understanding of…			
how data from the NC Check-Ins 2.0 might be used to inform instruction.	100%	86%	86%
how to interpret the results in the Class Item Reports.	100%	86%	86%
how to use the Individual Student Reports to interpret student performance data.	100%	79%	86%

Ratings by administrators and coaches were also consistently high, with the lowest rated item related to the module meeting their immediate needs for using the NC Check-ins 2.0. The difference between administrator and coach responses compared to teacher responses (both in general, and in this specific area) may be explained by the training's focus on teachers' use of NC Check-Ins 2.0 data in their classrooms.

	Teachers Strongly Agree and Agree	Administrators Strongly Agree and Agree	Coaches Strongly Agree and Agree
This training…			
was relevant to my professional development needs.	100%	88%	86%
met my immediate needs for using NC Check-Ins 2.0.	94%	69%	72%
provided examples of effective practice I can apply in my professional setting.	88%	79%	86%
will likely contribute to positive changes in my professional practice.	88%	79%	86%
will likely contribute to positive changes in student learning.	82%	79%	86%

Teacher-specific items presented the most variation within teacher responses and may reveal areas where the longer training and ongoing support could fill in gaps and increase teacher satisfaction. The item with the least agreement in the survey data, teachers' response to "I am better able to stay on pace with learning targets throughout the year," could be highly dependent on teachers' contexts and therefore less about the quality of the professional development.

As a result of my school's participation in the NC Check-Ins 2.0 pilot program

■ Disagree ■ Neither agree nor disagree ■ Agree ■ Strongly Agree

Statement	Disagree	Neither agree nor disagree	Agree	Strongly Agree
My students will be better prepared for the end-of-grade tests.		31%	44%	25%
I am better able to stay on pace with learning targets throughout the year.	13%	25%	38%	25%
I have a better understanding of the state's instructional standards.		31%	38%	31%
I am able to target instruction to my students' needs.		19%	50%	31%
I am better able to evaluate my students' learning.		31%	44%	25%

Module Feedback

Analysis of open-ended survey items indicated that respondents had favorable reactions to the 30-minute training module overall. Both teachers and those in leadership roles found the training beneficial to their practice. When asked what the most valuable aspect of the training was, answers tended to focus on gaining an understanding of the reports and seeing real examples of the reports. As one administrator noted, *"For me, this is the first time I have been able to clearly analyze an NC Interim Report."* Leaders also noted how useful the module was for developing an understanding of how to share the information with teachers at their schools. One teacher shared, *"I am both a teacher and the Test Coordinator for our school, and I find this very useful in helping to train our staff on the NC Check-In 2.0 and PATs."*

While the feedback was generally positive, respondents suggested course improvements. Frequent answers included making the course more interactive and adding video/audio. As one administrator noted, *"It would be great if this course could be presented with audio/video format. So many of our younger teachers view and receive information this way due to social media influences that it makes sense to enhance this course in this manner."* Respondents also advocated for more interactive activities. Suggestions included discussion boards, mini quizzes, and the ability to annotate on the report to make the learning more meaningful.

NCPAT Pilot Feedback

When asked to share feedback on participation in the NCPAT pilot, respondents frequently noted how helpful the Check-Ins, or Interims, were for guiding their classroom instruction. They value having formative data at multiple points throughout the year and appreciate how it does not feel like high-stakes testing. One teacher indicated they appreciated the *"more relaxed testing environment for the students as they do not feel the 'stress' like they do on an EOG because it is formatted to be given the same as a classroom assessment."* Further, respondents valued learning how to analyze the reports and appreciated the data points within them, with one teacher writing, *"Item analysis provides specific and useful data."*

Finally, there was a wide variety in answers when respondents were asked how the NC Check-Ins 2.0 could be improved. However, several answers were focused on the timing of the Check-Ins throughout the year, with respondents noting disconnects between when the Check-Ins/Interims took place versus what had been covered in the classroom already. One teacher emphasized this when they explained, *"Please allow adequate time for instruction before giving the interims, especially the first one. It is impossible to get all of that in with truly teaching and make the data more relevant as well as not [to] discourage students."* Other improvements surrounding the NC Check-Ins 2.0 included logistical issues, such as making the data usable in a downloadable CSV/Excel file, improving the ease of signing into the Check-Ins 2.0 system, providing more technology-enhanced (TE) sample questions, and offering more training to teachers before implementation.

Part V Appendices
V.A-01: Elementary Mathematics Webinar Audience Questions

ID	I have a question about the draft test specifications for . . .	Subcategory	Question
4	Grade 3	Test specifications	Interim 1 covers all 4 operations based upon the standards. Will the Interim focus on specific parts of a standard (like the Check In - where it may focus on multiplication instead of multiplication and division) - or - will it be assessing the whole standard?
5	Grade 3	Test specifications	3.oa.1 and 3.oa.2 are both listed... 3.oa.3 is word problem focused.. are we assessing word problems embedded in oa.1 and oa.2 ?
6	Grade 5	Test specifications	Will the DOK levels be similar to the Check-ins on the assessments a? On the Check-Ins this has meant that higher DOK is often an application of several standards with the listed standard as the Priority standard.
7	General question	Check-Ins/Interims	can you explain will teachers get access to the items on these formatives? like the check-ins!
8	General question	Check-Ins/Interims	It is our understanding that these interim assessments have a maximum of 5 standards per assessment. I noticed on the draft for 4th grade that there are 6 standards listed in Interim 1 and 7 listed in Interim 3. Can you provide some explanation?
9	General question	Test specifications	Where do we find the test specifications for 4th grade?
10	General question	Check-Ins/Interims	What is the most significant difference between the interim and the check-ins? Is it the goal of the state to transition to required interims? If we are doing Check-ins now, would we still do interims while voluntary?
11	General question	Leadership	Since this initiative was started under our previous state Superintendent, is there a strong support from our new leadership?
12	General question	Check-Ins/Interims	I have a basic question because I am confused. Are the "Interim Assessments" the same as CheckIns with the exception of the flexibility of choosing what assessment to implement when (due to pacing differences statewide)?
13	General question	Flex Summative	If the interims are optional, what would be the benefit of the flexible summative?
14	Grade 5	Test specifications	Would it be possible to see the DRAFT of the Interim for Grade 5 today?
15	General question	Flex Summative	In the flexible summative, specifically what impact will the interim assessment results have on what questions a student receives? Will it affect the number of questions? The types of questions? The standards assessed? The DOK of the questions?
16	General question	Voluntary/Mandatory	If an LEA chooses to give the three interims, are we simultaneously agreeing to the flexible summative? Is opting into the interim and flexible summative an LEA or individual school decision?
17	General question	Testlets	Would it be possible as you build the test bank from which each interim is built, to give each school the flexibility to select the standards individual in groups of 5 (or 6 or 7 etc) that would be included on that interim for that school? This would put it at the school's discretion to assess the standards that have been taught according to their own pacing. In theory it could look like a "drag and drop" type menu where schools were told to select x number of standards to create the test. The remaining standards would then be available for interims 2 & 3. Any standards already chosen would drop from the menu so they could not be assessed twice.
18	General question	Voluntary/Mandatory	If the interims remain voluntary, what happens if a school opts out of the NC interims? What assessment do students take at the end of the year?
19	General question	Flex Summative	Will the flexible summative replace the EOG? Is the flexible summative optional? What makes the flexible summative flexible? If a school does not give 2 interims by April will they not be able to take the flexible summative?
20	Grade 3	Timeline	At the AIM conference and in Dr. Howard's presentation on Tuesday, she said 3rd grade was not part of NCPAT. She went on to say it was because of all the other stuff, including RTA at 3rd grade. Her slides were specific to 4th-8th. Was this just in reference to the pilot?
21	General question	Flex Summative	How will the Flexible Summative look different for each student? If a student starts at a lower level entry point based on their performance on the Interims, how will they have about the same amount of questions as a student that has a higher level entry point and still test at the same level of rigor?
22	General question	Flex Summative	Will students who take a different assessment (Regular EOG) be compared within the same percentiles as students who take the Flexible Summative?
23	General question	Item type	Will there be a variety of formats for questioning?- Gridded response, multiple-choice, numeric entry? All grades?
24	General question	NC Check-Ins/Interims	If a system opts out of the flexible summative and interims, will the NC Check-ins still be available to them? If yes, will they stay the same or be revised?
25	General question	Flex Summative	Can you explain a little more about the difference in the flexible summative? So are you saying that the ones who struggle will have a lower entry point, but more questions?

26	General question	Timeline	Can you show us the timeline again? When will districts begin to implement the NC Interim/Flexible Summative assessments? I know some are piloting now....
27	General question	Test specifications	Where can I find the test specifications for other grade levels that are already piloting the NC Interims?
28	Grade 5	Test specifications	Would you mind showing the Test Specs for grade 5 one more time?
29	General question	Timeline	are we moving from pilot status to full implementation required for all districts by 2023?
30	General question	Check-Ins/Interims	Please clarify which check-ins will still be available in 22-23? Which grades in math? Will Check-ins still be available in Reading?
31	General question	Voluntary/Mandatory	When this is rolled out state wide, will this be mandatory state wide?
32	Grade 5	Test specifications	I'm wondering about placing adding fractions after multiplying fractions. When students multiply mixed numbers using an array, they need to add with unlike denominators.
33	General question	Pacing	Will the Tools4Teachers site be updated to reflect the testing changes?

V.A-02: Elementary Mathematics Survey Feedback on Interim Test Specifications

Job Title	Please provide your feedback on the groupings of the assessed standards for Grade 3 Math, keeping in mind psychometric considerations (3 domains and 5 standards per interim).	Please provide your feedback on the groupings of the assessed standards for Grade 5 Math, keeping in mind psychometric considerations (3 domains and 5 standards per interim).
Instructional Facilitator	I liked the way you explained it - looks good!	Nice - double checking on NF.7 / like a variety of DOK
Math Instructional Coach	I am concerned with the standards on Interim 1, because this Interim covers addition, subtraction, multiplication, AND division. Since 3rd grade is the initial introduction to both multiplication and division, could you consider moving 3.OA.2 to a later Interim? This would provide more time for teachers to build the critical foundation for these two new operations without rushing to expose before an Interim. If you replaced this with area (because of its direct relationship to multiplication), you would still meet your 3 domain requirement for Interim 1. I appreciate the time that you've taken to carefully consider the standard progression and the opportunity for districts to provide feedback!	This progresses nicely, and I think the timeline is appropriate for instruction. As feedback for the actual assessment, can you ensure that the open response questions are a similar proportion to the EOG? Currently on some Check Ins, there is a much higher percent of open response questions on the Check In when compared to the EOG. This skews scores lower and makes student progress more difficult to compare. (I don't worry as much about Calculator Active/Inactive proportion, as this is more dependent on what standards are being assessed.) Thank you for your consideration!
MATH SUPERVISOR	THESE STANDARDS ARE REASONABLE AND FEASIBLE.	THESE STANDARDS ARE REASONABLE AND FEASIBLE.
Teacher	I like the thought that was put into this grouping. It makes sense and looks doable.	I am not as familiar with 5th grade standards, but from what was said at the meeting these interims look adequate.
K-8 Math Instructional Specialist	The grouping of the standards is reasonable because they are essential for success with learning the other standards contained within each grouping.	The grouping of the standards is reasonable because they are essential for success with learning the other standards contained within each grouping.
K-5 Curriculum Specialist	I think the progression of the third grade standards look good.	I do not like the placement of NF.1. Many of the teachers that I work with have been unhappy about placing this standard after NF.3 and NF.4. It would make more sense to me to move MD.2 to third quarter and NF.1 to second quarter. Thanks for the information today.
Assistant Principal	The overall grouping of the interims are appropriate but would like to see OA9 swapped with MD8 allowing more insight into 2nd grade concepts of polygons and additional principals with perimeter. Not all standards in interim 1 would be completely taught by the first administration but can be used as a pre-assessment for standards to come.	Although this does not necessarily match our pacing, the grouping of standards together and interim 1 not having fractions is appropriate.
Elementary Math Coordinating Teacher		We would like to see the following grouping of standards: Interim 1: OA.2, OA.3, NBT.5, MD.5, MD.2 Interim 2: NBT.3, NBT.6, MD.1, NF.3, NF.4, Interim 3: NBT.7, G.1, NF.7, NF.1, G.3
K-5 Math Curriculum Specialist	We agree with the standards/domains for Interim 1. However, we are concerned with Interim 2 including NF.1 and NF.2 since it is typically not introduced until February or later. Our suggestion is to remove NF.1 and NF.2 from the second assessment. Instead of those standards, we recommend NC.3.OA.2 as well as NC.3.G.1. We agree with the standards/domains for Interim 3.	We agree with all three interim selections.
Director of Curriculum (Math & Science)	Move NF.1 and NF.2 to Interim 3 Move MD.7 to Interim 2 Move OA.3 to Interim 2 Add NBT.2 to Interim 2 Assess MD.5 and MD.7 to Interim 2	This pacing will require extensive revisions to our curriculum documents and will involve reordering many of the units of the published curriculum we use. It's unfortunate that we're required to report out on 4 domains in the first interim. I don't understand the connection of the coordinate plane to the standards in that first interim. Would prefer to have 5.G.1 in a later interim or not at all. Move NF.1 to Interim 2 Move NF.4 to Interim 3 Move NF.3 to Interim 3

District K-5 Math/Science Lead Teacher	I like the groupings of the standards selected for Interim 1. I also like that OA8 is tested twice, over two interims. This is a difficult standard and it will be nice to see students' growth and learning with this standard. I would prefer for MD7 and MD8 (area and perimeter) to be grouped with OA3 and OA8 (multiplication/division) for the Interim 2. Area is an excellent connection to multiplication. I would also like the fraction standards (NF) to be grouped together for Interim 3. Moving these standards would alter the domains for Interim 3. However, another standard such as G1 could be tested in Interim 3 to add another domain. Geometry would fit well here since students are partitioning shapes as they learn about fractions. Another possibility: Interim 2 - OA3, OA8, NBT3, MD7, MD8 Interim 3 - OA8, NF2, NF3, NF4, G1 (removed NF1 since it is connected with NF2)	I like the grouping of standards selected for Interim 1. I think they correlate well together. For Interim 2, I feel like NF4 (multiplication of fractions) should be moved to Interim 3. This is a very difficult standard and takes a long time for students to learn and master. Students must learn to multiply fraction by whole number, whole number by fraction, fraction by fraction, and mixed numbers. It is a very difficult standard. If it does stay in Interim 2, I would suggest testing it again in Interim 3. I would not test NF7 over two interims. This is a pretty easy standard for our students to master since it only involves unit fractions and can be easily modeled. If NF4 is removed from Interim 2, NBT3 (place value) could be moved to Interim 2. Other possibilities: Interim 2: NBT3, NBT6, NF3, NF7, MD2 Interim 3: NBT3, NBT7, NF1, NF4, MD1 Interim 2: NBT6, NF3, NF4, NF7, MD2 Interim 3: NBT3, NBT7, NF1, NF4, MD1
Associate Professor, Mathematics Education	The groupings work well for interim 1. One suggestion is to put MD.7 and MD.8 (area and perimeter) in Interim 2 because area and multiplication are so naturally connected. Then move NF.1 and NF.2 to Interim 3. This means you would need another domain for Interim 3. G.1 would be a good addition there since students spend lots of time partitioning shapes when working with fractions which would again allow for connections to be made across concepts during instruction. Another option would be MD. 5 for the same reason (connection to fractions). Thank you for putting OA.8 across two interim assessments, particularly since this standard has to do with word problems. I was slightly concerned to hear that no word problems would be included in interim 1 because the phrase word problems is not in the standard (maybe I heard this incorrectly in the webinar). First, all concepts should be introduced in context to boost conceptual understanding. Skipping straight to the symbolic often leads to rote use of algorithmic procedures without understanding. Second, if concepts are tested only with calculations and not word problems on the interims and then later with word problems on the EOG, will the interims provide a true indication of a where a student is performing for the flexible summative? Thank you for providing multiple offerings of the webinars and this link for people to give feedback at the conclusion.	during the webinar about teachers wanting multiplication of fractions before addition and subtraction and how that didn't really make sense to you, but you followed what teachers wanted. This issue more nuanced than that. Fraction learning trajectories in research (See Empson, et al. , 2011, as a good resource) suggest that fraction instruction begins and ends with multiplication and division with equivalence, addition and subtraction coming in the middle. Therefore, while we would want some multiplication and division to come before addition and subtraction, mastery of multiplication of fractions as described in 5.NF.4 would come at the end of that process and take a good part of the year. The trajectory suggests that students need to start by engaging in fair-sharing problems to see the relationship between fractions and division (first whole number division--2 people sharing 8 cookies; then division which results in a whole number and a fraction—2 people sharing 5 cookies; then problems which result in a fraction less than 1 – 2 people sharing 3 cookies) – described in NC.5.NF.3. Another first step in understanding fractions is the multiplication of a whole number by a unit fraction to make the connection to repeated addition (2/3 is the same as 1/3 + 1/3 which is 2 groups of 1/3). In NC this is covered in grade 4 (4.NF.4) and can be solidified in grade 5 in standards like NBT.1 where students look at digits in one place being 1/10 the value of the place to the left and 10 times the value of the place to the right, allowing students to make meaningful connections between fractions and decimals (metric measurement is a good connection here, too). The learning trajectories then move to equivalence and comparison, and addition and subtraction with unlike denominators before circling back to multiplication of fractions by a fraction. For this reason, NF.4 in Interim 2 is too early. Finally, in general, I would like to comment on the issue of flexibility in pacing. While you have made very clear the interims can be given in any order and at any time at the teacher's choosing, the sequential nature of mathematics (as noted in the above discussion of fractions, for example) means that interims really can't be given in any order.
Lead Elementary Math Teacher		Move 5.NBT.5 from Interim 1 to Interim 3. Move 5.NF.7 from Interim 3 to Interim 3 to Interim 1.

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K-12 Mathematics Specialist	It seems like a whole lot to test 3rd graders on these three AND the required RTA test(ing) that occurs. This is a LOT for a 3rd grader - it's also worth pointing out that while our students do see the OA in the first quarter this work is going throughout the year and is strongly embedded with the NBT and MD standards for the grade level. These standards build over the year - we would have to wait to give all three of these in the early spring due to the spiraling nature of these standards and the validity of the data they could produce.	No feedback on the order but again the 5.OA.3 traverses the year as does the NBT and NF work. These standards are addressed in units of study but are continually refined within and across units. While I understand the flexibility in assessing the interims to be completely effective we don't reach the depth of standards until the end of the year due to a deep spiral that exist in our instruction.
Instructional Coach	Is the psychometric decision final (as far as mandating 3 domains/5 standards in each Interim)? Is it possible to provide a bank of standards based questions, to allow districts more flexibility with their own pacing? With this option, each district could align the Interims to their current pacing guides and curriculum. We agree with moving 3.NF.1 and 3.NF.2 to the 2nd Interim.	Is the psychometric decision final (as far as mandating 3 domains/5 standards in each Interim)? Is it possible to provide a bank of standards based questions, to allow districts more flexibility with their own pacing? With this option, each district could align the Interims to their current pacing guides and curriculum. We feel that 5.NF.1 should be taught before 5.NF.4 and/or 5.NF.7 (we think they should learn to add/subtract fractions before multiplying/dividing fractions). The proposed sequence would be acceptable if students come to fifth grade with a firm foundation of fractions. We often have to back up and solidify foundational fractional understanding.
Interim Assistant Principal	Our 3rd Grade teachers were pleased with the specifications. Many of the standard's placement aligned with how they had filled out the survey.	Our 5th Grade teachers were pleased with the specifications.

V.A-03: Middle School Mathematics Webinar Audience Questions

ID	I have a question about the draft test specifications for . . .	Subcategory	Question
1	General question	Housekeeping	Can you please provide a link to the slides for today? It took a long time for the webex to open on my computer, sorry.
2	General question	Flex Summative	A school must use interims in order to participate in the flexible summative. For schools that do not use any interims what is their end of year assessment opt
3	General question	Test specifications	You mentioned that these tests were not bound by the calculator use as the check ins. Can you speak more on this? Or is there more to come at a later time?
4	General question	Flex Summative	When the flexible summative is available, will proficiency be based on an average of the interims and flexible summative, or will proficiency just be measured flexible summative at the end of the year? Can you provide more clarity on the term "flexible summative?" How is it different than the current EOG?
5	General question	NC Check-Ins/NC Interim	Will we receive data back after each Interim or after two Interims?
6	General question	Pacing	What about the grouping of the standards within the interim: What if they don't match? What if there is a standard that won't be taught until another quarte is included in that grouping.

Partnership with Friday's Institute:
The Friday's institute suggested pacing does not align with the grouping of standards on the NC Checkin, is this being considered when developing the groupi standards for NC Interims? |
7	General question	NC Check-Ins/NC Interim	Can you explain the difference between the Check-ins and Interims?
8	General question	Test specifications	Will you be able to share the state data with us that you are sharing in this webinar. I would really like to be able to share some of this with teachers to help t understand why certain standards are grouped together.
9	General question	Test specifications	How many items per interim? How much time should be allotted per interim?
10	General question	NC Check-Ins/NC Interim	We are unable to pull data by class this year, we can only pull as a large group. Can we get this updated to pull reports like we have in the past?
11	General question	NC Check-Ins/NC Interim	Will the current NC Interim for Grade 7 Math being used by pilot schools replace the NC Check In for Grade 7 math next year (2022-2023) for districts who ar the pilot but want to continue with NC Check-Ins?
12	General question	Mandatory/Voluntary	Are these interims going to be mandatory once the researchers finish? And, how will the data from these interims be used by DPI and by the researchers? Wi messaging be coming from DPI Assessment division to help administrators know how and how not to use the data (especially punitively towards teachers)?
13	General question	Flex Summative	How is it okay if students haven't covered a standard on an interim yet their Formative Summative is based on the Interims?
14	General question	Pacing	On the NCDPI website there is a partnership for Secondary Math, North Carolina Collaborative for Mathematics Learning (NC2ML). This partnership has a sug instructional framework that does not align with the grouping of standards on the NC Check ins. Will this be considered when grouping of standards for NC In

- my previous questions said partnership with Friday Institute. I looked on NCDPI for the correct name of the partnership. |
15	General question	Flex Summative	How is the coming summative assessment that the interims tie into different from EOGs?
16	General question	Flex Summative	How does the Flexible Summative differ from the EOG's
17	General question	NC Check-Ins/NC Interim	Will Interim test items be pulled from the same bank as NC Check-ins?
18	General question	NC Check-Ins/NC Interim	Will we still be able to give Check-ins (old standard alignment) or will they be replaced by Interims? This will take place in 2023-2024, correct?
19	General question	Mandatory/Voluntary	Are students required to complete two assessments prior to mid April?
21	General question	Test specifications	How is it determined which standards will be CI versus CA?
22	General question	NC Check-Ins/NC Interim	Just want to be sure I understood this correctly - Did you say that next year, Grades 4, 5, 7, and 8 will transition to NC Interims - but 3, 6 will continue Check Ir
23	General question	Test specifications	Do you have the Grade 7 Interim Specs that you could show?
24	General question	NC Check-Ins/NC Interim	Currently, the NC Check In questions remain the same from year to year. Will this be true for Interims as well?
25	General question	NC Check-Ins/NC Interim	If schools are currently piloting grade 4 and 7 Interims, and we have feedback for grade 6 and 8 interims, then why are we transitioning to grades 4, 5, and 7,8 year and not grades 4,6,7,8?
26	General question	Flex Summative	I just want to be sure I understood this correctly....
This will not be a required statewide system in 2 years? Up until this point, it has been the message that we are moving the entire state to this system of inter assessments and a flexible summative. However, that is not the case?
To help me understand the flexible summative, what will the difference be in the summatives two students who have had different math performance on the interims. Will one be shorter than another? Different language? Different numbers to make questions on different levels? I don't understand what will be "fle with this summative.
27	General question	NC Check-Ins/NC Interim	Did I hear correctly that next year, all schools will give the NC Interims for grades 4, 5, 7, 8?

28	General question	Participation	I appreciate the timeline slide you added about when resources will rollout. If we are not a pilot school district, can we opt-in at any time over the next few s years, or did we already have to make that election?
29	General question		When will NC Interims be available for district leaders to view?
30	General question		1.) What are the advantages of using the Interims vs. continuing the Check-ins? 2.) Are all schools automatically going to make these changes to Interim or do we have to request the change?
31	General question		Is it an expectation that everyone will be giving the NC Interims and Flexible assessments by 2024? And is it possible for this information to also be shared with CAOs? Sometimes information regarding content and testing gets lost.
32	General question		Will the flexible summative EOG be available for non-pilot schools who participate in the Interim Assessments?
33	General question		Does the whole district need to buy-in or can individual schools choose to join?
34	General question		Does the whole district need to opt in or can a single school opt in for interims next year?
35	General question		On a spectrum of availability to review the test with the students, we currently have quite a bit of openness with the check-ins but a lot of security with the E Where will the NC Interims fall on this spectrum?
36	General question		So each student could possibly have different flexible summaries within the same class, right?
37	General question		Is it reasonable to state that "Flexible Summatives" are a form of differentiated EOG's based on Interim data?
38	General question		Are charter schools allowed to participate in the pilot program?
39	General question		Will teachers and schools get student specific data from the Flexible Summative? In other words, we there be a data breakdown of how the students did on th common item set AND the customized item set? And are those customized item sets still grade-level aligned, or do they assess above/below grade level?
40	General question		Do you have to opt in as a pilot for every grade level that is available. (i.e. could we opt in for every grade level except for 3rd).
41	General question		If our system wanted to "volunteer" to be a part of the study where do we fit in? Go straight into 2022-2023 plan with 4th and 7th taking flexible summative year?
42	General question		I am still confused on the flexible summative. There are 30 or so different versions...if we have students from all levels NP through Level 5 in our class - will al students in that class take the same version? If so, is this really flexible? Obviously the EL's and EC students could benefit flexibility, but they are mixed in wit students causing differentiation to be a necessity daily.
44	General question		Where could we see the draft specifications for grade 7?
45	General question		Have there been any conversations around different groupings for Accelerated Middle School courses that may have some major differences in groupings wh compared to grade level courses?
47	General question		Appreciate the flexibility on which order we give the tests! Is there any chance that schools can reorganize the standards on each test as well to fit local curric
48	General question		Are there plans to follow this new framework for Math 1?
49	General question		When do you expect to release the final drafts of the standards covered on the interims?
50	General question		What is the deadline for deciding if our PSU will participate in the NC Interim process? Cost? Sorry if I missed this earlier...
51	General question		Are there any plans for the interims OR flexible summative to become mandatory?
52	General question		Will this order/interim process remain optional after the 23-24 school year? If it becomes required, it feels a lot like the state mandating a pacing order/curric
53	General question		Will we receive any information about the summative?

V.A-04: Middle School Mathematics Survey Feedback on Interim Test Specifications

Job Title	Please provide your feedback on the groupings of the assessed standards for Grade 6 Math, keeping in mind psychometric considerations (3 domains and 5 standards per interim).	Please provide your feedback on the groupings of the assessed standards for Grade 8 Math, keeping in mind psychometric considerations (3 domains and 5 standards per interim).
8th Grade Math Teacher	N/A	Why are 8.G.3 & 8.G.5 being tested on separate interims? These two standards tend to lend themselves to being taught together well, particularly after an emphasis on 8.EE.7. Please consider revision.
6th grade Math teacher	Looks good. Wondering why RP.2 was taken out.	Looks good
teacher	Where is RP.2?	Looks good.
Teacher	Where is 6.RP.2?	Looks good.
6th Grade Teacher	Where will 6.RP.2 come into pacing? Why are area, surface area, and volume still separated?	n/a
8th Grade Math	N/A	Disregard my previous Question, I was mistaken on my Standards!
Math Instructional Coach	I appreciate the shift in EE standards that provides formative assessment on skills that will impact instruction in subsequent years. Thanks for your hard work! As feedback for the actual assessment, can you ensure that the open response questions are a similar proportion to the EOG? Currently on some Check Ins, there is a much higher percent of open response questions on the Check In when compared to the EOG. This skews scores lower and makes student progress more difficult to compare. (I don't worry as much about Calculator Active/Inactive proportion, as this is more dependent on what standards are being assessed.) Thank you!	Progression of standards looks great on this one! As feedback for the actual assessment, can you ensure that the open response questions are a similar proportion to the EOG? Currently on some Check Ins, there is a much higher percent of open response questions on the Check In when compared to the EOG. This skews scores lower and makes student progress more difficult to compare. (I don't worry as much about Calculator Active/Inactive proportion, as this is more dependent on what standards are being assessed.) Thank you!
MATH CURRICULUM SUPERVISOR	THIS SEEMS REASONABLE AND FEASIBLE.	WE WILL NEED TO ALTER OUR PACING A LITTLE, BUT THIS WILL WORK.
District Math Specialist	These are closely aligned to the Check-Ins already in place. I appreciate the similarity for pacing purposes.	Interim 1 is TOO packed! Why do we have to have 5 standards tested? Didn't you say that we had to test between 3 and 5? There is no flow to these standards, not to mention the number of additional standards that must be taught in conjunction with these standards. Teachers will be OVERWHELMED at the beginning of the school year with this looming over them.
K-8 Math Instructional Specialist	The grouping of the standards is reasonable because they are essential for success with learning the other standards contained within each grouping.	The grouping of the standards is reasonable because they are essential for success with learning the other standards contained within each grouping.
Secondary Curriculum & Instruction and Professional Learning Specialist	These align with our current units and I think these groupings make sense and emphasize what's really important for algebra moving forward.	The groupings for interims 2 and 3 make sense, but I do not think having 8.F.1 in Interim 1 will be helpful data. It is the only standard in the grouping that includes two quantities/variables. The other work being done on the coordinate plane in this grouping is dilations, translations, etc. and I could see it being confusing for students to study shapes on the coordinate plane so closely to defining functions on the coordinate plane. Because the grouping already has three domains, and because we do not introduce functions (8.F.1) in the context of any of those other standards, it stands out as one that doesn't belong in that grouping. It also tends to lock us in to a certain order by putting F1 in Interim 1, then F3-5 in Interim 2, then 8F2 and EE8 in Interim 3. It would force more of a change of sequence for us.
Secondary Math Curriculum Specialist	Concerns about the selection of standards for 6th grade. Did input from each district have the same weight? Ex: districts with 5,000 students and districts with 50,000 students. Many of the large districts are using a curriculum and NC2ML scope and sequence that allows the concepts to be developed and the listings for 6th grade are different than what we will cover.	Will there be opportunities to revisit the standards that are assessed and when? Many of the large districts are using a curriculum and NC2ML scope and sequence that allows the concepts to be developed and the listings for 8th grade are extremely different than what we will cover.
Middle School Math Teacher	No Comments at this time. I am still processing a lot of it. Your logic makes sense.	The previous alignment was difficult. Splitting the functions standards are going to help a lot. Thank you!
Math Specialist	No concerns this looks appropriate.	Will the website Tools 4 NC teachers be updated to match the new interims? Some schools offer a compacted 7/8 grade math course will this be addressed or adjusted to meet the new interims?

		the data on 8th grade made it difficult to come to agreement. For example, it was said that a majority of those surveyed say they teach G.2 and G.4 in first quarter but do not need to get data reports on them. Therefore, the decision was made not to include them on interim one. We know from NC district leaders that the interims (or check ins) dictate pacing in this state, even though the NC Assessment representatives continue to disregard this feedback. Since the interims will be used as a default pacing guide, I worry that G.2 and G.4 will not be taught until last quarter but should be taught earlier. Also, EE.1 is a conceptually difficult standard to master in 8th grade and takes all year. It absolutely should not appear on interim 1. And related to the interims becoming pacing guides, they become so because administrators often use results from assessments in harmful ways, harmful to both students and teachers. While NC Assessment representatives can say that they are only to be used for formative assessments, we know that this will not be the case everywhere and we will be doing damage to students. What supports are being put into place now to keep the results from interims from doing damage? We were told that the Friday Institute is putting together classes, but what are they about, when are they and who attends? How will these be advertised and how can you ensure that the right people get the right message? We have been told that the interims can be given in any order and that districts can choose two of the three. Much of mathematics has an order to it, so how is it possible to take interims out of order? Research has revealed learning progressions for each grade level that specify the order that content should be taught. I have a feeling that research backed learning progressions were not used to create these interims. Rather, we are letting psychometrics dictate learning in NC, not research about students' learning of mathematics. This is unethical. And if districts can choose 2 of 3 interims, then why have 3? Why not just have 2 interims with longer space between them? And why must there be 3 domains tested psychometrically? That has not been made transparent. Why won't DPI release the survey results that led to these clusterings? Why can't this be made transparent? Who were the pilot districts? If this is a research project, what if the research shows it is not working for our students? Will these interims stay, despite a failed research project? I know that it has been said that these interims are not mandatory, but that statement is always followed by "at this time." That usually means that they will become mandatory down the line. What if they are not sound?
Professor of Mathematics Education		A very likely scenario is that students will not have learned a standard (maybe two) by the time interim 1 is to be implemented. If
Middle School Math Instructional Coach	Interim 1-Beginning the school year with NS.1-4 and EE.1 may be a better start to the year. Many skills in 6th grade involve fractions, dividing, and decimals. By beginning this way, you could then be reviewing these standards when teaching the rest of the 6th grade curriculum. Then move into RP1 and 3. Interim 2-Next do RP.4 & 2. Then move into all things G. Interim 3-Finish G and EE.	Interim 1-Beginning with rational/irrational numbers and exponents is a great start to the school year. The other standards seem to jump around and not have consistent flow from one standard to the next. Transformations should be moved from Interim 1 to Interim 2 and added with G.5. Interim 2-EE.7-8 together Interim 3-All things Functions.
Sr. Admin MS Math	We have no concerns for the groupings of the Grade 6 standards on each of the Interims. However, we do have concerns about the pacing. Based on our pacing, if we do decide to participate in the Interims, this will push administering Interim 3 close to EOG time. There won't be a lot of time to use the data to inform/adjust instruction.	Based on the grouping of the standards and our pacing, we would have to give Interim 2 and 3 after quarter 3 and Interim 1 in quarter 4. If the configuration doesn't change, we can't use this at all.
Middle Grade Instructional Coach	These groupings seem logical. Teachers are concerned about pacing and finishing teaching material prior to NC Interim being administered. This is a question about the process, not the grouping of standards, but will PSUs have flexibility with scheduling interims to fit their pacing?	No concerns about this pacing for 8th grade.
Math Supervisor	NC.6.NS.4 should not be on interim 1. Please move this until Interim 2 (or even 3). I do not understand why this standard is grouped with the others in this grouping. We teach NS.2 and 3 after second quarter is over, but I am not concerned because we can late until later to give Interim 2. I am a little concerned over NC.6.EE.1.	These grouping for 8th Grade are ridiculous. They do not match any guidance given by any NC groups or any of the curriculum options we have for NC. I would not even know at what point in the year any of these interims would make sense to administer. I understand what you were saying about needing some sort of standards for Interim 1 and the whole state had said those Geometry standards shouldn't be tested, however, that doesn't mean you should just pick standards that we teach later in the year and move them up. NC.8.F.1 is not taught in many district until after Christmas. It doesn't even make sense for Interim 2 much less Interim 1. With the groupings as they stand now we would have to wait and give all three of these interims as late in the year as possible, back to back. NS.1 and EE.1 are some of the very last standards we teach in all of 8th grade. But then you have EE.7 and F.1 that are mid to late year and G.3 which is the only standard we actually teach in the beginning of the year. For Interim 2, F.3 is the only standard taught mid year. G.5 is beginning of the year and all the other F standards are after second quarter is over. I say all of this to say, I understand we have flexibility in how we give interims, but there are no options that would make this a productive use of class time in 8th grade. They would all have to be given at the very last possible moment right before end-of-year testing which is not going to helpful for teachers and will create a stressful testing situation for students.

k-12 math specialist	No feedback, other than things I think are out of your control. Forcing 3 domains on these is artificial - the depth of the domain across the grade level needs to be considered but I understand that is not up for discussion.	The first interim is completely useless and the justification given for this sequencing is not consistent with any research or major work of the grade for 8th grade learning trajectories. NS.1 is artificially placed here - first of all we do not need feedback on this standard. But more importantly we would never separate this from the pythagorean theorem work of 8th grade. The is a supporting standard to understanding the types of numbers that you arrive at from pythagorean theorem calculations - teaching this before or even outside of the pythagorean theorem is artificial and not at all connected to learning progressions of an 8th grade student. We do start the year with transformational geometry and build slope from there. This entire sequencing is odd of order and quite frankly pretty useless. You could build a check in with linear and a check in with functions and then another one the supporting work of the grade but then you wouldn't have your 3 domain rule. 8th grade is a very different grade level from the other grades - it does shift into a large focus on the EE and F standard with a few supporting standard in the SP and G domains. Forcing 3 domains onto the interims makes this artificial. At what point can you look at the value and depth of the domains? In 8th grade especially they are not treated equal and therefore 3 domains is artificial and will cause all kinds of problems. I don't have a better suggestion - you're going to have the same trouble with Math One as well. My only suggestion would be to build a Function (Function or not, interpreting functions, input/output/domain) and a Linear (solving linear equations, linear concepts of functions, understanding slope - you could easily put transformations on this as well) and a leftover (that hopefully we could get the other 2 in and not have to worry about). Or perhaps you could split the linear concepts into a linear function work (include the slope interpretation which is an SP standard) and the algebraic work (solving equations).
Secondary Math Coach	According to Achieve the Core (https://achievethecore.org/category/774/mathematics-focus-by-grade-level) which our district uses to prioritize standards across the middle school curriculum - 6.G.1, 6.G.4, and 6.G.3 are all part of a support cluster that is only specifically taught for a short amount of time. Also, 6.NS.2, 6.NS.3, and 6.NS.4 are part of an additional cluster which again is only explicitly taught for a short amount of time. We feel it might be more beneficial to replace some or all of these standards with standards from the major clusters (according to Achieve the Core) that aren't present on the Interim Specifications List - 6.RP.2, 6.RP.4, 6.NS.5, 6.NS.7, 6.NS.8, 6.NS.9, 6.EE.3, 6.EE.4, 6.EE.5, 6.EE.8, 6.EE.9. Overall, we would like to see more major cluster standards assessed.	Interim 1 - There are 4 different strands when only 3 are required. Our district currently teaches 8.NS.1 and 8.EE.1 towards the end of the year so we would prefer these to be replaced with standards that more align with solving equations for example - 8.G.5. We would also like to point out that 8.NS.1 is from a supporting cluster according to Achieve the Core (https://achievethecore.org/category/774/mathematics-focus-by-grade-level) which our district uses as a tool to prioritize standards for our middle school math curriculum. Interim 2 - We would suggest replacing 8.EE.7 with 8.EE.8 because systems fits nicely with the functions standards, and 8.EE.7 would have already been assessed in interim 1. 8.G.5 also fits better with material in interim 1 so 8.G.5 could be replaced with a Statistics standard (8.SP.1, 8.SP.2, or 8.SP.3 - since this is an additional cluster according to Achieve the Core it would make sense to not assess all 3 of them). This would also fulfill the need for 3 different domains. Interim 3 - If 8.SP.1, 8.SP.2, and 8.SP.3 could be moved to Interim 2 we think 8.G.6, 8.G.7, and 8.G.8 are very important standards in the 8th grade curriculum. 8.EE.3 or 8.EE.4 would also be beneficial in this Interim. Note: 8.EE.2 is the only major standard that isn't included in our suggestions that we feel would be beneficial to add to the interims.

V.A-05: NC Check-Ins 2.0 Grades 3–8 Mathematics Specifications

Innovative Assessment Demonstration Authority (IADA)
North Carolina Personalized Assessment Tool (NCPAT) Pilot
Grades 3–8 Mathematics Specifications
NC Check-Ins 2.0

Purpose and Overview

The North Carolina Personalized Assessment Tool is a system of through-course assessment opportunities aimed toward a balanced assessment system that will provide granular data for immediate feedback about students' performance throughout the year. The system is currently being developed as a pilot study under the U.S. Department of Education's Innovative Assessment Demonstration Authority (IADA) and includes three interim resources (NC Check-Ins 2.0) and a flexible summative assessment. At the conclusion of the pilot phase in 2024, adjustments based on feedback may be made before statewide implementation.

The current design purposes of the North Carolina Personalized Assessment Tool are to

- provide educators, students, and stakeholders with immediate and detailed feedback on student performance on grade-level-specific content standards so classroom instruction may be tailored to an individual student's needs;

- provide a progress indicator for each interim on individual student performance in relation to overall grade-level performance expectation; and

- provide a reliable estimate to inform a student's starting point on the flexible summative assessment that will be used to determine an academic achievement level and to provide data for state and federal accountability.

Content Specification Development

The NCDPI Accountability Services/Test Development Section used a combination of in-person and online surveys and webinars to gather feedback from educators across the state.
The following outlines the development of content specifications for NC Check-Ins 2.0:

- To address the main purposes of NC Check-Ins 2.0, the content design was expanded to include at least three domains with a minimum of five standards.

- North Carolina does not have a state-adopted pacing guide and curriculum organization is a local decision. Thus, the criteria for groupings of content standards were based on reviewing feedback gathered from participants.

- In January 2019, the NCDPI Accountability Services/Test Development Section facilitated an in-person NC Check-Ins 2.0 specification workshop for grade 4. Teachers and educators, with the majority representing IADA pilot schools, recommended possible groupings of standards. Groupings for each grade 4 NC Check-In 2.0 were later summarized and are currently being used during this pilot phase (see Table 2).

- In October of 2020, a series of surveys was used to gather input on recommended groupings for grade 7 from educators participating in the IADA pilot. Feedback was

reviewed and groupings for each grade 7 NC Check-In 2.0 were summarized and are currently being used during this pilot phase (see Table 5).

- In the fall of 2021, statewide surveys were used to gather feedback to guide recommended groupings of grade-level content standards for NC Check-Ins 2.0. In December 2021, staff from the Test Development Section facilitated eight statewide webinars to present draft content specifications for grades 3, 5, 6, and 8. At the conclusion of each webinar, a follow-up survey was shared with webinar participants to gather additional feedback. The NCDPI Accountability Services/Test Development Section collaborated with mathematics content staff from the Academic Standards Section at NCDPI and Technical Outreach for Public Schools (TOPS) at North Carolina State University to review feedback and summarize groupings (see Tables 1, 3–4, 6).

Table 1. Content Specifications NC Check-Ins 2.0 Math Grade 3

Grade 3 Mathematics NC Check-Ins 2.0 Assessed Standards		
A	**B**	**C**
NC.3.OA.1	NC.3.OA.3	NC.3.OA.8
NC.3.OA.2	NC.3.OA.8	NC.3.NF.2
NC.3.OA.9	NC.3.NBT.3	NC.3.NF.3
NC.3.NBT.2	NC.3.MD.7	NC.3.NF.4
NC.3.MD.3	NC.3.MD.8	NC.3.G.1

Table 2. Content Specifications NC Check-Ins 2.0 Math Grade 4

Grade 4 Mathematics NC Check-Ins 2.0 Assessed Standards		
A	**B**	**C**
NC.4.OA.1	NC.4.OA.3	NC.4.NBT.5
NC.4.NBT.2	NC.4.NBT.5	NC.4.NF.3
NC.4.NBT.4	NC.4.NBT.6	NC.4.NF.4
NC.4.NBT.7	NC.4.NF.1	NC.4.NF.6
NC.4.G.1 and NC.4.MD.3	NC.4.NF.2	NC.4.NF.7
		NC.4.G.2 and NC.4.MD.4

Table 3. Content Specifications NC Check-Ins 2.0 Math Grade 5

Grade 5 Mathematics NC Check-Ins 2.0 Assessed Standards		
A	**B**	**C**
NC.5.OA.2	NC.5.NBT.6	NC.5.NBT.3
NC.5.OA.3	NC.5.NF.1	NC.5.NBT.7
NC.5.NBT.5	NC.5.NF.4	NC.5.NF.3
NC.5.MD.5	NC.5.NF.7	NC.5.NF.4
NC.5.G.1	NC.5.MD.2	NC.5.MD.1

Table 4. Content Specifications NC Check-Ins 2.0 Math Grade 6

Grade 6 Mathematics NC Check-Ins 2.0 Assessed Standards		
A	**B**	**C**
NC.6.RP.1	NC.6.RP.4	NC.6.NS.6
NC.6.RP.3	NC.6.NS.1	NC.6.EE.2
NC.6.NS.4	NC.6.NS.2	NC.6.EE.6
NC.6.G.1	NC.6.NS.3	NC.6.EE.7
NC.6.G.4	NC.6.EE.1	NC.6.G.3

Table 5. Content Specifications NC Check-Ins 2.0 Math Grade 7

Grade 7 Mathematics NC Check-Ins 2.0 Assessed Standards		
A	**B**	**C**
NC.7.G.1	NC.7.EE.1	NC.7.EE.4
NC.7.NS.3	NC.7.EE.3	NC.7.G.5
NC.7.RP.1	NC.7.EE.4	NC.7.G.6
NC.7.RP.2	NC.7.NS.3	NC.7.SP.7
NC.7.RP.3	NC.7.RP.3	NC.7.SP.8

Table 6. Content Specifications NC Check-Ins 2.0 Math Grade 8

Grade 8 Mathematics NC Check-Ins 2.0 Assessed Standards		
A	**B**	**C**
NC.8.NS.1	NC.8.EE.7	NC.8.EE.8
NC.8.EE.1	NC.8.F.3	NC.8.F.2
NC.8.EE.7	NC.8.F.4	NC.8.SP.1
NC.8.F.1	NC.8.F.5	NC.8.SP.2
NC.8.G.3	NC.8.G.5	NC.8.SP.3

NC Check-Ins 2.0 Format

The NC Check-Ins 2.0 are being developed currently as online resources with twenty-five total items each. Each of the three mathematics interim resources will include four-option multiple-choice items, open-ended numeric response items, and technology-enhanced items. For all grade levels, the NC Check-Ins 2.0 will have calculator inactive and calculator active sections.

Administration and Review

To accommodate local control of curriculum, the NCDPI will offer a flexible administration and review window for all interim resources that will open October 1 and close May 31. PSUs may choose to administer interims in the order that best aligns with their curriculum. The NCDPI recommends one interim administration per quarter.

Proctors are not recommended for the administration of interims. The interims are not timed; however, the estimated time for most students to complete a twenty-five-item 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 October 1 to May 31. Like NC Check-Ins, 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 grade-level-specific content standards so teachers may adjust instruction. Previewing or disclosing interim content to students before an administration may result in an invalid interpretation about student performance on grade-level-specific content standards.

IADA Pilot Timeline

- During the 2022–23 school year, IADA pilot schools will participate in the NC Check-Ins 2.0 and the flexible summative assessment. Students must complete at least two NC Check-Ins 2.0 interims by April 15, 2023, for their data to be used to determine an informative start point on the flexible summative. During the 2022–23 school year, all NC schools may choose to participate in the reading and mathematics NC Check-Ins 2.0 at grades 4, 5, 7, and 8. Only pilot schools will participate in the flexible summative assessment for grades 4 and 7.

- NC Check-Ins will be available only for grades 3 and 6 reading and mathematics, and grades 5 and 8 science.

- Beginning with the 2023–24 school year, all NC schools may choose to participate in the NC Check-Ins 2.0 at grades 3–8. NC Check-Ins will no longer be available for grades 3–8 in reading and mathematics. The plan for 2024 is to administer the flexible summative statewide following review of the IADA pilot.

V.A-06: NC Check-Ins 2.0 Grades 3–8 Reading Specifications

Innovative Assessment Demonstration Authority (IADA)
North Carolina Personalized Assessment Tool (NCPAT) Pilot
Grades 3–8 Reading Specifications
NC Check-Ins 2.0

Purpose and Overview

The North Carolina Personalized Assessment Tool is a system of through-course assessment opportunities aimed toward a balanced assessment system that will provide granular data for immediate feedback about students' performance throughout the year. The system is currently being developed as a pilot study under the U.S. Department of Education's Innovative Assessment Demonstration Authority (IADA) and includes three interim resources (NC Check-Ins 2.0) and a flexible summative assessment. At the conclusion of the pilot phase in 2024, adjustments based on feedback may be made before statewide implementation.

The current design purposes of the North Carolina Personalized Assessment Tool are to

- provide educators, students, and stakeholders with immediate and detailed feedback on student performance on grade-level-specific content standards so classroom instruction may be tailored to an individual student's needs;

- provide a progress indicator for each interim on individual student performance in relation to overall grade-level performance expectation; and

- provide a reliable estimate to inform a student's starting point on the flexible summative assessment that will be used to determine an academic achievement level and to provide data for state and federal accountability.

Content Specification Development

The NCDPI Accountability Services/Test Development Section facilitated a specification workshop in January 2020 as part of the process to gather input from relevant stakeholders. The goal of the specification workshop was to gain input from teachers and curriculum specialists from across the state on assessment design features for the North Carolina Personalized Assessment Tool interims. Participants at the workshop reviewed reading content standards to recommend whether there were any currently assessed reading standards that would not be suitable to for the North Carolina Personalized Assessment Tool interims and to guide future development by identifying other standards that could be assessed through other item types. At the conclusion of the review process, the workshop participants endorsed the NCDPI proposed design that all grade standards assessed on the End-of-Grade assessment be included on NC Check-Ins 2.0.

Table 1. Content Specifications NC Check-Ins 2.0 Reading Grades 3 –8

Domain	Grade 3*	Grade 4	Grade 5	Grade 6*	Grade 7	Grade 8
Reading for Literature						
RL.1	✓	✓	✓	✓	✓	✓
RL.2	✓	✓	✓	✓	✓	✓
RL.3	✓	✓	✓	✓	✓	✓
RL.4	✓	✓	✓	✓	✓	✓
RL.5				✓	✓	
RL.6			✓	✓	✓	✓
RL.7						
RL.8						
RL.9						
RL.10						
Reading for Information						
RI.1	✓	✓	✓	✓	✓	✓
RI.2	✓	✓	✓	✓	✓	✓
RI.3	✓	✓	✓	✓	✓	✓
RI.4	✓	✓	✓	✓	✓	✓
RI.5		✓		✓	✓	✓
RI.6				✓	✓	✓
RI.7						
RI.8	✓	✓	✓	✓	✓	✓
RI.9						
RI.10						
Language						
L.4	✓	✓	✓	✓	✓	✓
L.5.a	✓	✓	✓	✓	✓	✓

*Available beginning with the 2023-24 school year

NC Check-Ins 2.0 Format

The NC Check-Ins 2.0 for reading are currently being developed as online, fixed-form interims with twenty-four total items divided across three reading selections. The distribution of reading selection type will vary across interims, but all interims will have at least two distinct selection types (Informational, Literature, or Poetry (grades 6-8 only)). Each reading selection will have six to nine multiple-choice or technology enhanced items.

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 October 1 and close May 31. PSUs may choose to administer interims in the order that best aligns with their curriculum. The NCDPI recommends one interim administration per quarter.

Proctors are not recommended for the administration of interims. The interims are not timed; however, the estimated time for most students to complete a twenty-four-item 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 October 1 to May 31. Like NC Check-Ins, 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 grade-level-specific content standards so teachers may adjust instruction. Previewing or disclosing interim content to students before an administration may result in an invalid interpretation about student performance on grade-level-specific content standards.

IADA Pilot Timeline

- During the 2022–23 school year, IADA pilot schools will participate in the NC Check-Ins 2.0 and the flexible summative assessment. Students must complete at least two NC Check-Ins 2.0 interims by April 15, 2023, for their data to be used to determine an informative start point on the flexible summative. During the 2022–23 school year, all NC schools may choose to participate in the reading and mathematics NC Check-Ins 2.0 at grades 4, 5, 7, and 8. Only pilot schools will participate in the flexible summative assessment for grades 4 and 7.

- NC Check-Ins will be available only for grades 3 and 6 reading and mathematics, and grades 5 and 8 science.

- Beginning with the 2023–24 school year, all NC schools may choose to participate in the NC Check-Ins 2.0 at grades 3–8. NC Check-Ins will no longer be available for grades 3–8 in reading and mathematics. The plan for 2024 is to administer the flexible summative statewide following review of the IADA pilot.

V.A-07: Item Writer and Reviewer Demographic Information for Mathematics and Reading at Grades 3–8 for 2021–22

Reviewers			
	Gender		
		Female	64
		Male	5
	Ethnicity		
		African American	10
		Asian	1
		Caucasian	56
		Hispanic	1
		Multi-Racial	1
		Native American	0
		Other	0
	Eth		
		Black	10
		Hispanic	1
		Other	2
		White	56
	Degree		
		BA	9
		Ed.D	1
		BS	11
		MA	23
		MLS	1
		MS	20
		Other	4
	Deg		
		Graduate	45
		Other	2
		Undergraduate	22
	Exp		
		0-5	0
		6-10	9
		11-15	12
		16-20	15
		20+	33
Writers			
	Gender		
		Female	152
		Male	24
	Ethnicity		
		African American	20
		Asian	1

		Caucasian	142
		Hispanic	3
		Multi-Racial	2
		Native American	6
		Other	2
	Eth		
		Black	20
		Hispanic	3
		Other	11
		White	142
	Degree		
		6-Year Degree	1
		BA	21
		BS	44
		Ed.D	6
		MA	60
		MLS	3
		MS	37
		Other	4
	Deg		
		Graduate	108
		Other	3
		Undergraduate	65
	Exp		
		0-5	5
		6-10	21
		11-15	31
		16-20	43
		20+	76

V.A-08: Test Development Process

Assessment Development Process
End-of-Grade, End-of-Course, NC Check-ins, and Grade 3 Portfolio

The test development process is a complex process that involves multiple checks and balances guided by testing experts and professionals. This process begins after new content standards are adopted by the North Carolina State Board of Education. This process includes multiple stakeholders who serve in advisory roles to the test development process including

- North Carolina Educators and Administrators;
- North Carolina Department of Public Instruction (NCDPI)–Standards, Curriculum, and Instruction Specialists;
- North Carolina State University–Technical Outreach for Public Schools (NCSU-TOPS) Content;
- NCSU-TOPS Exceptional Children, English Learners, and Visually Impaired Specialists;
- NCSU-TOPS Production, Editing, and Copyright Staff; and
- Outside Content-Specific Experts.

Prior to the test development process, the standards to be measured are defined during test specification meetings. North Carolina educators collaborate and develop recommendations for a prioritization of standards indicating the relative importance of each standard, the anticipated instructional time, and the appropriateness of the standard for test design for each content area. Subsequently, test development staff from the NCDPI meet with various advisors to review the recommendations from the teacher panels and to adopt final weight distributions across the domains for each grade level.

Once test specifications are adopted, item writers and reviewers complete training on the new subject-specific content standards. The training also includes an overview of item writing, sensitivity, and bias guidelines. North Carolina educators start the item development process by creating new items with various advisors (see bulleted list above) providing feedback on item quality throughout the 18-step test development process. The development process concludes with the NCDPI Test Measurement Specialist evaluating the recommendations from all advisors then finalizing and approving the item, reading selection, or test form.

Item Review Process
Step 1: Item Created
Test items are written by trained item writers, including North Carolina teachers, educators, curriculum specialists, and content specialists at Technical Outreach for Public Schools (TOPS) at North Carolina State University. All items are submitted through an online test development system. The item writer assigns the item

- a Clarifying Objective/Standard,
- a secondary Clarifying Objective/Standard (when appropriate),
- a Depth-of-Knowledge (DOK) rating (if applicable),
- a knowledge type and cognitive category (if applicable), and
- an Achievement Level Descriptor (ALD).

The item writer is also responsible for citing sources of any stimulus material used for an item.

Step 2: Item Evaluation
TOPS Content Specialists review the item for accuracy of content, appropriateness of vocabulary (both subject-specific and general), adherence to item writing guidelines, and sensitivity and bias concerns. All content specialists look for contexts that might elicit an emotional response and inhibit a student's ability to respond as well as contexts that students may be unfamiliar with for cultural or socioeconomic reasons. The specialists review the item's assigned

- Clarifying Objective/Standard,
- Secondary Clarifying Objective/Standard (if applicable),
- DOK rating (if applicable),
- Achievement Level Descriptor,
- Key/Distractors, and
- Knowledge type and cognitive category (if applicable) with the following possible results:
  - If the content of the item is not accurate or does not match an objective/standard, or if the DOK of the item is not appropriate, the item is revised or deleted.
  - If necessary, the specialist should edit the stem and foils of the items for clarity and adherence to established item writing guidelines.
  - If there are necessary revisions outside the technical scope of the specialist (such as artwork, graphs, or edits to reading selections), the item is moved to **Step 3** for edits by Production staff.
  - If the item contains stimulus material, the item is moved to **Step 3** for copyright checks by Copyright staff.

Once the item is accepted, the item is sent to **Step 4** (Teacher Content Review).

Step 3: Production Edits/Copyright Checks
Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production staff. Items with stimulus materials are reviewed by Copyright staff for copyright concerns and proper citation. Once the item is revised by Production staff or reviewed for copyrights, it is moved back to **Step 2** for another review by a Content Specialist.

Step 4: Teacher Content Review
Teacher item content reviewers are required to undergo the same training as item writers and must have content-specific knowledge. Two North Carolina trained item reviewers look for any quality issues or bias/sensitivity issues and suggest improvements, if necessary. The item writer at **Step 1** cannot review their items at **Step 4**. These trained reviewers evaluate the item in terms of

- alignment to grade-level content standard;
- content of item: accurate content, there is one and only one correct answer, appropriate and plausible context;
- cognitive category;
- being clearly written;
- motivated and plausible distracters;
- appropriate assigned achievement level descriptor;
- appropriate assigned depth of knowledge;
- design conforming to North Carolina item writing guidelines;
- appropriate language for the academic content area and age of students; and
- bias or sensitivity concerns.

Step 5: Content Review and Reconcile Teacher Content Reviews
A Content Specialist re-reviews the item for accuracy of content, appropriateness of vocabulary (both subject-specific and general), and checks to make sure the item is correctly keyed. The Content Specialist also reviews all comments/suggestions from the teacher reviewers and makes any appropriate revisions. The Content Specialist may choose one of the following options:

- Send the item to **Step 6** (Production) if there are revisions required that are outside the technical scope of the Content Specialist.
- Send the item to **Step 7** (EC/EL/VI) if the item is ready for the next stage of review.
- Send the item back to **Step 4** (Teacher Review) if major revisions are made to item for a new review.
- Delete the item.

Step 6: Production Edits
Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 5** for review by a Content Specialist.

Step 7: Exceptional Children (EC), English Learners (EL), and Visually Impaired (VI) Review
The EC/EL/VI specialist reviews the item for accessibility concerns for EC, EL, and VI students, such as accessibility of graphics for student with or without vision, and also considers accessibility in Braille. This review addresses concerns arising from bias or sensitivity issues, such as contexts that might elicit an emotional response and inhibit a student's ability to respond or contexts that students may be unfamiliar with for cultural or socioeconomic reasons. Review of reading level of the item is considered along with stem and foil quality (stem is a clear and complete question; foils are straightforward; no repetitive words; the grammar of the stem agrees with the foils; review modifying words and make suggestions for bold print and italics or removal; look for idioms and two-word verbs that may provide an accessibility issue for EL students). For Grade 3 Portfolio Items, a Literacy specialist evaluates each item for grade-level appropriateness.

Step 8: Reconcile EC/EL/VI Review
A Content Specialist reviews comments/suggestions from the EC/EL/VI reviewer and the Literacy reviewer for Grade 3 Portfolio, and makes any necessary revisions. The Content Specialist should indicate in the comments whether any comments/suggestions from the reviewer were not approved and incorporated. The Content Specialist may choose one of the following options:

- Send the item to **Step 9** (Production) if there are revisions required that are outside the technical scope of the Content Specialist.
- Send the item to **Step 10** (Grammar Review) for review.
- Send the item back to **Step 4** (Teacher Review) if major revisions are made to item for a new review.
- Delete the item.

Step 9: Production Edits
Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 8** for another review by a Content Specialist.

Step 10: Grammar Review
Professional editors review items for grammar, punctuation, and spelling. If the item had previously been sent back to **Step 8** by Editing, the editor should check that the suggested revisions were addressed. If the editor suggests revisions to the item, the item will move back to **Step 8** for review by a Content Specialist. If the editor approves the item as is, the item proceeds to **Step 11** (Security Check).

Step 11: Security Check
Production staff checks to make sure no duplicate copy of the item exists in the test development databases. If there is a duplicate copy of the item or a requested revision was not made, then the item is sent back to **Step 8**.

Step 12: Content Lead Review and Reconcile
Content Lead reviews the item and makes any necessary revisions and also reviews the item comment history to ensure all comments have been addressed. The Content Lead may choose one of the following options:

- Send the item to **Step 13** (Production) if there are revisions required that are outside the technical scope of the Content Lead.
- Move the item to **Step 14** (If approved, move item to **Step 14** NCDPI/Standards, Curriculum, and Instruction Review).
- Send the item back to **Step 4** (Teacher Review) or **Step 2** if major revisions are needed or made to an item.
- Delete the item.

Step 13: Production Edits
Items needing revisions outside the technical scope of the Content Lead (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 12** for review by the Content Lead.

Step 14: NCDPI/Standards, Curriculum, and Instruction Review
NCDPI/Standards, Curriculum and Instruction Specialists review the item and confirms a clarifying objective or a content standard. The reviewer evaluates the item in terms of

- alignment to grade-level content standard;
- presence of one and only one correct answer;
- the assigned Cognitive Process and Knowledge Type or Depth of Knowledge;
- the assigned Achievement Level Descriptor; and
- bias, sensitivity, or accessibility issues.

Step 15: Reconcile Standards, Curriculum, and Instruction Review
A Content Specialist reviews comments/suggestions from the NCDPI/Standards, Curriculum, and Instruction Specialist, and makes any necessary revisions. The Content Specialist may choose one of the following options:

- Send the item to **Step 16** (Production) if there are revisions required that are outside the technical scope of the Content Specialist.
- Send the item to **Step 17** (Grammar Review) for review.
- Send it back to **Step 2** if major revisions are needed or made to item.
- Delete the item.

Step 16: Production Edits
Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 15** for review by a Content Specialist.

Step 17: Grammar Review
Professional editors review items for grammar, punctuation, and spelling. If the item had previously been sent back to **Step 15** by Editing, the editor should check that the suggested revisions were addressed. If the editor suggests revisions to the item, the item will move back to **Step 15** for review by a Content Specialist. If the editor approves the item as is, the item proceeds to **Step 18** for the Test Measurement Specialist (TMS) review.

Step 18: NCDPI/Test Measurement Specialist Review
A NCDPI/TMS reviews for overall item quality. The TMS also checks that quality control measures have been followed by reading the comments from all previous reviews and verifying that the comments have been addressed by the Content Specialists. The TMS evaluates the item for

- alignment to grade-level content standard;
- verification there is one and only one correct answer;
- assigned Cognitive Process and Knowledge Type or Depth of Knowledge;
- bias, sensitivity, or accessibility issues;
- appropriate assigned achievement level descriptor; and
- the overall item quality.

The TMS has four options when submitting the review:

- If the TMS approves the item as is, the item proceeds to **Step 19** (Item Approved).
- If the TMS indicates edits are needed, the item is moved back to **Step 15** for review by a Content Specialist.
- If TMS wants Standards, Curriculum, and Instruction to see the item again, the TMS moves the item back to **Step 14**.
- The TMS can delete the item.

Step 19: Item Approved
The item is now ready for placement on a form.

Item Review

Legend
- Content Lead
- Content Specialist
- EC/EL/VI
- Editing
- Production
- Teachers
- TMS
- DPI-SCI

Step 01 — Item Created

Step 02 — Evaluation* – –Edits/Done– – Step 03 — Production

Step 04 — Teacher

Step 04 — Teacher

Step 05 — Reconcile* – –Edits/Done– – Step 06 — Production

Step 07 — EC/EL/VI

Step 08 — Reconcile* – –Edits/Done– – Step 09 — Production

Changes

Security Issues

Step 10 — Grammar

Step 11 — Security

Step 12 — Reconcile* – –Edits/Done– – Step 13 — Production

Step 14 — DPI-SCI

Step 15 — Reconcile* – –Edits/Done– – Step 16 — Production

Changes

Reconciliation

Step 17 — Grammar

Step 18 — TMS*

Step 19 — Item Approved

*At these Steps, Items can be moved back to any previous step or removed from the Item Pool

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Selection Review Process for
End-of-Grade, End-of-Course, NC Check-ins, and Grade 3 Reading Portfolio

Prior to Step 1, the Reading Content Specialist searches for appropriate selections for each assigned grade using criteria from NCDPI/Test Development staff, NCDPI/Standards, Curriculum, and Instruction staff, and the North Carolina *Standard Course of Study.* The Reading Content Specialist also reviews the selections for any bias and sensitivity concerns.

————————————————————**Offline**————————————————————

Step 1: Folder Created
The Content Specialist creates a review folder for the selection. A Selection Form Submission tracking form is completed with the necessary copyright information (Content Specialist's name, date, title, author, source, excerpts, photographs, etc., as well as copyright date and ISBN, if applicable, and the selection's readability score), and is attached to the inside of the review folder. Any suggested edits are noted on the selection. A selection routing sheet is attached (includes grade level and title of selection) to the outside of the folder.

Step 2: Copyright Approval & Title/Author Search
Editing staff determines if the selection is public domain, gratis, or copyrighted (if copyrighted, determine whether the publisher may be used or if there is a concern, such as excessive expense) and searches all selection databases to determine if the selection is already in use.

Step 3: Content Approval
The Content Lead evaluates the selection in terms of

- alignment to grade-level expectations,
- content and length of the selection,
- readability of the selection,
- achievement level descriptors,
- bias or sensitivity concerns, and
- issues brought up by copyright review.

Based on review, the Content Lead can

- approve the selection as is,
- approve the selection with edits or additions (including edits to or addition of artwork), or
- delete the selection.

NOTE: If selection is included in the form, the Content Lead sends a new copy to the Copyright Staff so they can seek permission from the publisher.

Step 4: Exceptional Children (EC), English Learner (EL), and Visually Impaired (VI) Review
The EC/EL/VI reviewer evaluates the selection for accessibility concerns for EC, EL, and VI students in terms of

- concerns because of bias or sensitivity issues, such as contexts that might elicit an emotional response and inhibit a student's ability to respond and contexts that students may be unfamiliar with for cultural or socioeconomic reasons;
- accessibility of graphics for students with or without vision;
- appropriateness for Brailling;

- prior knowledge required to understand the selection; and
- unfamiliar vocabulary that cannot be understood from the surrounding context.

Based on review, the EC/EL/VI reviewer can recommend to

- use the selection,
- use the selection with suggested edits, or
- not use the selection.

Step 5: NCDPI/Test Measurement Specialist Review
The NCDPI/Test Measurement Specialist (TMS) evaluates the selection in terms of

- alignment to grade-level expectations;
- content and length of the selection;
- readability of the selection;
- achievement level descriptors;
- any bias or sensitivity concerns including any raised by the EC/ESL/VI reviewer; and
- edits made by content at **Steps 1 and 3** or edits suggested in the **Step 4** review.

If the TMS rejects the selection, it is deleted from the pool. If the TMS approves the selection, it is moved to **Step 6**.

Step 6: Prepare for Online
Issues noted in EC/EL/VI and TMS reviews are reconciled by a Content Specialist, and the selection is sent to production to be entered into the online test development system.

NOTE: If any edits or additions are made to the selection (including edits to or addition of artwork), the Content Specialist sends a new copy to the Copyright Staff so they can seek permission from the publisher if copyrighted should the selection be designated for inclusion in a test form.

————————————————**Online Test Development System**————————————

Step 1: Selection Created
Production staff performs another selection security check and enters the selection into the test development system.

Step 2: Compare Original
Editing staff compares the original copy of the selection to what has been entered into the test development system and indicates any necessary corrections. The corrections may arise from discrepancies between the TDS and the original or from correctable errors in the original, such as grammatical errors, misspellings, or archaic/foreign spelling of words.

Step 3: Creation Reconcile
A Content Specialist resolves corrections indicated in **Step 2**.

Step 4: Creation Edits
Production makes requested changes and selection is sent back to **Step 3** for a Content Specialist to confirm requested changes have been made to selection.

Step 5: NCDPI/Standards, Curriculum, and Instruction Review
A NCDPI/Standards, Curriculum, and Instruction Specialist reviews the selection. The reviewer evaluates the selection in terms of

- alignment to grade-level expectations;
- content and length of the selection;
- readability of the selection; and
- bias or sensitivity concerns.

Step 6: NCDPI/Test Measurement Specialist Review
The NCDPI/Test Measurement Specialist (TMS) does a final review on the selection and reviews all comments from the NCDPI/Standards, Curriculum, and Instruction Specialist. The TMS either approves the selection (with comments regarding revisions, if any) or deletes the selection from the pool.

Step 7: Reconcile Curriculum and Instruction Review and Test Measurement Specialist Review
A Content Specialist reviews any comments/changes requested by Standards, Curriculum, and Instruction or by the Test Measurement Specialist and sends changes to **Step 8** (Production) to be made, if necessary. Once any changes are made, the selection is sent to **Step 9**.

NOTE: If the selection is designated for inclusion on a test form, any edits or additions are made to the selection (including edits to or addition of artwork). The Content Specialist then sends a new copy to the Copyright Staff if permission is needed from the publisher.

Step 8: Production Edits
Production makes requested changes and selection is sent back to **Step 7** for a Content Specialist to confirm requested changes have been made.

Step 9: Selection Approved
Selection is now ready to have items written.

Selection Review

Legend

☐	Content Lead
☐	Content Specialist
☐	EC/EL/VI
☐	Editing
☐	Production
☐	DPI TMS
☐	DPI-SCI

Step 01
Folder Created

Done

Step 02
Copyright Approval
& Title/Author Search → Selection Rejected

Step 03
Content Approval

Step 04
EC/EL/VI Review

Step 05
TMS Review → Selection Rejected

Step 06
Prepare for Online

──── Offline to Online Move ──────── Offline to Online Move ────

Step 01
Selection Created

Step 02
Compare Original

Step 03
Creation
Reconcile* ‑ ‑Edits/Done‑ ‑ → **Step 04**
Creation Edits*

Step 05
DPI-SCI Review

Step 06
TMS Review* → Selection Rejected

Step 07
DPI and TMS
Reconcile* ‑ ‑Edits/Done‑ ‑ → **Step 08**
DPI and TMS Edits*

*At these Steps, Selections can be moved back to any
previous step or removed from the Selection Pool

Step 09
Selection
Approved

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Form Review Process for End-of-Grade, End-of-Course, NC Check-ins, and Grade 3 Reading Portfolio

Prior to Step 1, a NCDPI/Psychometrician chooses the test items for the initial placement of the preliminary base form, taking key balance into consideration.

Step 1: Upload Form

A Psychometrician creates the form, and uploads a file listing the Item IDs to populate the form. The form is sent to **Step 3** for form review. Forms can come back to this step from **Step 3** with suggestions for replacements, or from **Step 4** with suggestions for replacements or revisions (either concerning the content of the item or for key issues). The Psychometrician can replace items or incorporate revisions. The Psychometrician sends the form to **Step 2** (Production Edits) for revisions to artwork, graphs, or reading selections.

Step 2: Production Edits

Revisions to operational items such as artwork, graphs, and reading selections are made by Production staff. If any revisions are made, the form is sent back to **Step 1** for review by a Psychometrician.

Step 3: Form Review

A Content Specialist reviews the items on the form for content alignment and quality of content and reviews the form for conflicts or repetition of content.

If any items are replaced because of concerns regarding conflicts or repetition of content among items, or for quality concerns, the Content Specialist sends the form back to **Step 1** with comments for the Psychometrician. Otherwise, the form is sent to **Step 4** for Test Measurement Specialist Review.

Step 4: NCDPI/Test Measurement Specialist Review/Key Balance

This review step is conducted to ensure that the form is ready for Outside Content-Specific Expert Review and Key Check (i.e., the form is ready to send to printer) and considers both item- and form-level quality as follows:

- The Test Measurement Specialist (TMS) reviews each item, including any comments. Suggestions for revisions to items are made as needed.
- After reviewing the quality of each item, the form is evaluated in terms of cueing, repetition, content coverage, and balance across Depths of Knowledge and Types/Cognitive Processes.
- The key balance of the form is checked. If the key balance needs adjusting, these suggestions are made by the NCDPI/TMS and the form is returned to **Step 1**.

After reviewing each item, the TMS adds any form-level comments and suggested improvements, and they can

- send the form back to **Step 1** with suggestions for replacements or revisions,
- move the form to **Step 5** (Reconcile), or
- delete the form from the pool.

Step 5: Reconcile by Content Specialist
The Content Specialist reviews the form comments to ensure any suggested replacements or revisions have been addressed and that any approved replacements or revisions have been made correctly. If any replacements or revisions need adjusting, the Content Specialist moves the form back to **Step 1** with comments. Otherwise, the form moves to **Step 6** (Outside Content-Specific Expert Review and Key Check).

Step 6: Outside Content-Specific Expert Review and Key Check
At this step, the form is sent for Outside Content-Specific Expert Review and Key Check. Outside Content-Specific Experts review the form by answering each item, selecting the correct answer and providing any comments and/or suggestions about the item. They verify that the item is presented correctly and that the answer to the item is correct and they provide overall suggestion about item quality. (Outside content-specific experts are not involved in creating any item. They are not affiliated with NCDPI or NCSU-TOPS agencies and serve as objective, independent reviewers. These experts must have verified credentials and experience in their subject matter area and be approved by NCDPI as content experts.)

Step 7: Reconcile Outside Content-Specific Expert Review
A Content Specialist checks the keyed response from the Outside Content-Specific Expert Review against the key for each item and reviews all comments and/or suggestions from the Outside Content-Specific Expert. Any key disagreements are reconciled, and any comments and/or suggestions from the Outside Content-Specific Expert are addressed.

Step 8: NCDPI/Psychometric Review/Key Balance
A Psychometrician performs the following:

- reviews comments/suggestions from the Outside Content-Specific Expert and from Editing staff, with consultation with the TMS and Content Specialists;
- checks key agreement with the Outside Content-Specific Experts and resolves any disagreements through consultation with the TMS and Content Specialists;
- makes any approved revisions, or indicates revisions for Production staff to make, and sends the form to **Step 9** (Production Edits); and
- reloads the form if any items are replaced at **Step 8**.

Step 9: Production Edits
Revisions to items outside the technical scope of the Psychometrician (items such as artwork, graphs, and reading selections) are made by Production staff. Once the revisions are made, the form is sent back to **Step 8** for review by a Psychometrician.

Step 10: Grammar Review
Two editors independently review the form for grammatical and/or formatting issues, providing comments and/or suggestions as needed.

Step 11: Content Lead Review/Finalize Form
The Content Lead reviews the form comment history to ensure all comments have been addressed and consults with VI specialist regarding accessibility issues. After reviewing the form, the Content Lead

- moves the form back to **Step 8** if any edits to operational items need review or
- approves the form and moves it to **Step 12** (Item Placement) for cloning and embedding or

- approves the form and moves it to **Step 21** (Final Manager Review) when the form is not being cloned or embedded.

Step 12: Item Placement
A Content Specialist places approved items in the embedding slots. The Content Specialist needs to check that

- the placed items match the layout files for the version of the base form;
- the quality of items embedded is appropriate for experimental use;
- the items do not cue operational items or other embedded items;
- the items diversify topic coverage across content;
- the keys of the embedded items do not create an unbalanced key for the overall form and the overall difficulty level of the items; and
- the Achievement Level Descriptor and Depth of Knowledge or Knowledge Type/Cognitive Process are consistent with the surrounding base form.

After placing the items, the Content Specialist may choose one of the following options:
- Send the form to **Step 13** (Production Edits) for revisions to artwork, graphs, or reading selections.
- Send the form to **Step 14** (Cueing Check).
- Delete the form.

Step 13: Production Edits
Revisions to embedded experimental items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 12** for review by a Content Specialist.

Step 14: Cueing Check
The Content Specialist and TMS review the entire form to check that the embedded items do not create cueing or repetition issues, the embedded items diversify topic coverage across content, and that the embedded items' quality is acceptable. The TMS also makes sure the key balance is adequate. TOPS EC/EL/VI also looks over the embedded items to make sure that there are not any accessibility issues. TOPS EC/EL/VI makes a recommendation whether the form should be used for Braille. After the review, the Content Specialist can replace or revise embedded items based on the review. The Content Specialist then moves the form to **Step 15** for Outside Content-Specific Review/Grammar check.

Step 15: Outside Content Expert Review Key Check and Grammar Check
An Outside Content-Specific Expert and Editing staff member each review the embedded items. The Outside Content-Specific Expert reviews the embedded items by working and answering each item and providing any comments or suggestions as needed. Editing staff reviews the items for any grammar, punctuation, spelling issues, and/or formatting issues, providing comments and/or suggestions as needed.

Step 16: Reconcile by Content Specialist
A Content Specialist checks the keyed response from the Outside Content-Specific Expert Review against the key for each item and reviews all comments and/or suggestions from the Outside Content-Specific Expert. Any key disagreements are reconciled and any comments and/or suggestions from the Outside Content-Specific Expert are addressed. The Content Specialist also reviews suggestions from Editing staff and makes any necessary revisions.

If any items require substantial revisions, the item should be replaced and the form sent back to **Step 15**.

The Content Specialist can

- send the form to **Step 17** (Production Edits) for needed revisions,
- send the form to **Step 18** (TMS Final Review), or
- delete the form.

Step 17: Production Edits
Revisions to embedded experimental items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 16** for review by a Content Specialist.

Step 18: Test Measurement Specialist Final Review
The TMS reviews the form, considering the comments from the **Step 15** reviews to ensure all comments have been addressed properly. The key balance of the form is checked. The TMS makes any needed edits to items. The TMS sends the form to **Step 19** (Production Edits) if any revisions are needed to artwork, graphs, or reading selections. Then the TMS sends the form to **Step 20** (Final Grammar).

Step 19: Production Edits
Revisions to operational items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 18** for review by the TMS.

Step 20: Final Grammar Review
An Editor reviews the entire form for grammatical and/or formatting issues, providing comments and suggestions as needed.

Step 21: Final Manager Review
A Content Manager reviews comments/suggestions from the Final Grammar Review or **Step 24** (Compare) and makes any necessary revisions to embedded items. The Manager checks the form for overall quality and reviews the form comment history to ensure all comments have been addressed. The Content Manager ensures that the VI review was completed at **Step 11.**

After reviewing the form, the Content Manager may choose one of the following options:

- Approve the form and send it to **Step 23** (Audio Approval) if the form will be administered online.
- Approve the form and send it to **Step 24** (Compare) if the form will be administered on paper.
- Send the form to **Step 20** (Psychometrician) if there are suggested revisions to operational items for the Psychometrician to consider.
- Send the form to **Step 22** (Production Edits) for revisions to artwork, graphs, or reading selections.
- Reject the form.

Step 22: Production Edits
Revisions to embedded experimental items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 21** for review by a Content Manager.

Step 23: Audio Approval
Content Specialists review the audio for each item and either approves the audio or indicates it needs a correction. After the audio for all items have been approved, the form is sent to **Step 24** (PDF/Online Check).

Step 24: PDF/Online Check
At this step, Production staff exports the form as a document and formats the document per formatting guidelines. The form is placed in a folder with a signoff sheet for the following tasks:

- Two Editors review the form for formatting concerns as well as any grammatical issues.
- A Content Specialist reviews the form for content and evaluates any comments and or suggestions from Editing reviews. If there are any edits to embedded items to execute in the online test development system, the Content Specialist indicates with each item what edits are approved and sends the form back to **Step 21**. Any suggestions that are rejected should be noted in the form comments. Any suggested edits to operational items that Content staff feel warrant consideration are directed to the TMS and Psychometrician for consideration.
- A Content Manager makes any approved edits in the online test development system and sends the form to **Step 23** for recorded online forms or **Step 24** for unrecorded or paper-only forms.
- After production staff makes corrections to the paper copy, the file is converted to a PDF and printed. The printed copy undergoes the same review as bullets 1–3 above.
- After the PDF of the form is approved, the form is sent to **Step 25** (Final Freeze/Export). If the forms are also offered online, the online forms will also be sent to **Step 25**.

Step 25: Final Export
The form, all items, and any selections are operationally locked to prevent any revisions. This is to ensure that the published versions of the form, items, and selections are preserved electronically. Any online forms undergo checks in a variety of platforms to ensure that each item's content displays correctly and audio files for non-reading subjects read correctly.

Step 26: Form Approved
The form is approved for administration.

Form Review

Legend
- Content Lead
- Content Manager
- Content Specialist
- Editing
- IT Staff
- Outside Content
- Production
- Psychometrician
- TMS

Step 01 — Upload Form

Frozen edits needed → Step 02 — Production

Step 03 — Form Review

Replace/Rebalance

Step 04 — TMS Review Key Balance*

Replace/Rebalance

Step 05 — Reconcile*

Step 06 — OC

Audio for Items can be recorded from this point forward

Step 07 — Reconcile*

Step 08 — Psy Review Key Balance*

Frozen edits needed → Step 09 — Production

Step 10 — Grammar   Step 10 — Grammar

Frozen edits needed

Step 11 — Lead Review*

Form cloned upon approval/ready for embedding

Non-Embedded Form

Step 12 — Item Placement*

Unfrozen Edits needed → Step 13 — Production

Step 14 — Cueing Check And Key Balance

If Item(s) require substantial changes, the Form will need to be sent back to step 12 for Item replacement

Step 15 — OC   Step 15 — Grammar

Step 16 — Reconcile*

Unfrozen Edits needed → Step 17 — Production

Step 18 — TMS Final Review*

Frozen Edits needed → Step 19 — Production

Step 20 — Final Grammar

Step 21 — Final Manager Review*

Frozen Edits needed → Step 22 — Production

Form Frozen (Form can be printed)

Step 23 — Audio Approval

Step 24 — Paper/TDS Compare

Step 25 — Final Freeze/Export

*At these Steps, Forms can be moved back to any previous step or removed from the Form Pool

Step 26 — Form Approved

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Item Development Process for the NCEXTEND1 Alternate Tests

Prior to **Step 1**, the standards to be measured must be defined. The test development process begins after new content standards are adopted by the North Carolina State Board of Education. All item writers and reviewers are required to complete training modules. The training includes a general course on item writing guidelines, including lessons on sensitivity and bias concerns.
The writers and reviewers must also complete subject-specific courses on the Extended Content Standards.

Step 1: Item Created

Test items are written by trained item writers, including North Carolina teachers, educators, curriculum specialists, and content specialists at Technical Outreach for Public Schools (TOPS) at North Carolina State University. All items are submitted through an online test development system. The item writer assigns the item

- an Extended Content Standard,
- a secondary Clarifying Objective/Standard (when appropriate),
- a Depth-of-Knowledge (DOK) rating (if applicable),
- a knowledge type and cognitive category (if applicable), and
- an Achievement Level Descriptor (ALD).

The item writer is also responsible for citing sources for any stimulus material used for an item.

Step 2: Item Evaluation

Content Specialists review the item for accuracy of content, appropriateness of vocabulary (both subject-specific and general), adherence to item writing guidelines, and sensitivity and bias concerns. All Content Specialists (subject and the EC/EL/VI specialist) look for contexts that might elicit an emotional response and inhibit students' ability to respond as well as contexts that students may be unfamiliar with for cultural or socioeconomic reasons. The specialists review the item's assigned

- Clarifying Objective/Standard,
- Secondary Clarifying Objective/Standard (if applicable),
- DOK rating (if applicable),
- Achievement Level Descriptor,
- Key/Distractors, and
- Knowledge type and cognitive category (if applicable) and consider the following options:
  o If the content of the item is not accurate or does not match an objective/standard, the item is revised or deleted.
  o If necessary, the specialist should edit the stem and foils of the items for clarity and adherence to established item writing guidelines.
  o If there are necessary revisions outside the technical scope of the specialist (such as artwork, graphs, or edits to reading selections), the item is moved to **Step 3** for edits by Production staff.
  o If the item contains stimulus material, the item is moved to **Step 3** for copyright checks by Copyright staff.

Once the content specialist has spent the needed time on the item and certifies that it is ready to be on a form, the items is sent to **Step 4** (Teacher Content Review).

Step 3: Production Edits/Copyright Checks

Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production. Items with stimulus materials are reviewed by Copyright staff for copyright concerns and proper citation. Once the item is revised by Production or reviewed for copyrights, it is moved to **Step 2** for another review by a Content Specialist.

Step 4: Teacher Content Review

Teacher item reviewers are required to undergo the same training as item writers. At this step, two North Carolina trained item reviewers look for any quality issues or bias/sensitivity issues and suggest improvements, if necessary. One of the teacher reviewers is an exceptional children's teacher, and the other is a general education teacher. The exceptional education teacher pays particular attention to the item's appropriateness for student populations with moderate to severe intellectual disabilities. Both trained reviewers evaluate the item in terms of

- alignment to grade-level content standard;
- content of item: accurate content, there is one and only one correct answer, appropriate and plausible context;
- cognitive category;
- being clearly written;
- motivating and plausible distracters;
- appropriate assigned achievement level descriptor;
- appropriate assigned depth of knowledge
- design conforming to North Carolina item writing guidelines;
- appropriate language for the academic content area and age of students; and
- bias or sensitivity concerns.

Step 5: Reconcile Teacher Content Reviews

A Content Specialist carefully reviews all comments/suggestions from the content reviewers and makes any appropriate revisions. The Content Specialist may choose one of the following options:

- Send the item to **Step 6** (Production) if there are revisions required that are outside the technical scope of the Content Specialist.
- Send the item to **Step 7** (EC/EL/VI) if the item is ready for the next stage of review.
- Send it back to **Step 4** (teacher review) if major revisions are made.
- Delete the item.

Step 6: Production Edits

Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 5** for review by a Content Specialist.

Step 7: Exceptional Children (EC), English Learner (EL), and Visually Impaired (VI) Review

The EC/EL/VI Specialist reviews the item for accessibility concerns for students with significant cognitive disabilities along with concerns for EL and VI students, such as accessibility of graphics for students with or without vision and also considers Brailling accessibility. This review addresses bias or sensitivity issues such as contexts that might elicit an emotional response and a inhibit

student's ability to respond and contexts that students may be unfamiliar with for cultural or socioeconomic reasons. Review of reading level of the item is considered along with stem and foil quality (stem is a clear and complete question, foils are straightforward, no repetitive words, the grammar of the stem agrees with the foils, idioms do not provide an accessibility issue).

Step 8: Reconcile EC/EL/VI Review
A Content Specialist reviews comments/suggestions from EC/EL/VI Specialist and makes any necessary revisions. The Content Specialist may choose one of the following options:

- Send the item to **Step 9** (Production) if there are revisions required that are outside the technical scope of the Content Specialist.
- Send the item to **Step 10** (Grammar Review) for review.
- Send it back to **Step 4** (teacher review) if major revisions are made.
- Delete the item.

Step 9: Production Edits
Items needing revisions outside the technical scope of the Content Specialist (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 8** for another review by a Content Specialist.

Step 10: Grammar Review
Professional editors review items for grammar, punctuation, and spelling with the following possible results:

- If the item had previously been sent back to **Step 8** by Editing, the editor should check that the suggested revisions were addressed.
- If the editor suggests revisions to the item, the item will move back to **Step 8** for review by a Content Specialist.
- If the editor approves the item as is, the item proceeds to **Step 11** (Security Check).

Step 11: Security Check
Production staff checks to make sure no duplicate copy of the item exists in previous test forms or released items. If there is a duplicate copy of the item, then the item is returned to **Step 8** and removed from the item pool.

Step 12: Alternate Test Lead Review
The Alternate Test Lead reviews the comment history to ensure all comments have been addressed in terms of assessing students with significant cognitive disabilities. The Alternate Test Lead may choose one of the following options:

- Approve the item and move it to **Step 13** (Content Lead Review).
- Send it back to **Step 8** (Content Specialist Review) if revisions are requested.

Step 13: Content Lead Review and Reconciliation
The Content Lead reviews the item and makes any necessary revisions and also reviews the item comment history to ensure all comments have been addressed. The Content Lead may choose one of the following options:

- Send the item to **Step 14** (Production) if there are revisions required that are outside the technical scope of the Alternate Test Lead.
- Approve the item and move it to **Step 15** (Test Measurement Specialist (TMS) Review).

- Send it back to **Step 2** if major revisions are made to the item.
- Delete the item.

Step 14: Production Edits
Items needing revisions outside the technical scope of the Content Lead (such as artwork, graphs, and reading selections) are revised by Production staff. Once the item is revised by Production staff, it is sent back to **Step 13** for review by the Content Lead.

Step 15: Test Measurement Specialist Final Review
A TMS reviews for overall item quality and alignment. The TMS also checks that quality control measures have been followed by reading the comments from all previous reviews and verifying that the comments have been addressed by the Content Specialists.

The TMS evaluates the item for

- alignment to grade-level content standard;
- verification there is one and only one correct answer;
- appropriate assigned achievement level descriptor;
- appropriate cognitive category;
- bias, sensitivity, or accessibility issues; and
- the overall item quality.

The TMS has these options when submitting the review:

- If the TMS approves the item as is, the item proceeds to **Step 16** (Item Approved).
- If the TMS indicates edits are needed, the item is returned to **Step 13** for review by a Content Specialist.
- The TMS can also choose to **delete** the item.

Step 16: Item Approved
The item is now ready for placement on a form.

Alternate Assessment Item Review

Legend

- ■ Content Lead
- ■ Content Specialist
- ■ EC/EL/VI
- ■ Editing
- ■ Production
- ■ Teachers
- ■ TMS
- ■ Alternate Assessment Lead

Step 01
Item Created

Step 02
Evaluation — - -Edits/Done- - → Step 03 Production

Step 04 Teacher   Step 04 EC Teacher

Step 05
Reconcile — - -Edits/Done- - → Step 06 Production

Step 07
EC/EL/VI

Step 08
Reconcile — - -Edits/Done- - → Step 09 Production

Changes

Step 10
Grammar

Security Issues

Step 11
Security

Step 12
Alternate
Assessment
Lead

Step 13
Reconcile — - -Edits/Done- - → Step 14 Production

Changes

Step 15
TMS

Step 16
Item Approved

Selection Review Process for the *NCEXTEND1* Alternate Tests

Prior to Step 1, a Reading Content Specialist searches for appropriate selections for each assigned grade using criteria from Test Development staff and the North Carolina Extended Content Standards. The Reading Content Specialist also reviews the selections for any bias and sensitivity concerns. The Content Specialist creates a folder (color-coded by genre) for the selection. A Selection Form Submission slip is completed with the necessary copyright information (specialist's name, date, title, author, source, excerpts, etc., as well as copyright date and ISBN, if applicable) and the selection's readability score, and this is attached to the inside of the folder. Any suggested edits are noted on the selection. On the outside of the folder, a selection routing sheet is attached (includes grade level and title of selection). The Content Specialist also works with Production to create graphics to illustrate content in the selections.

Step 1: Selection Entered
Production staff enters the selection into the test development system. Graphics are inserted into the selection as well.

Step 2: Grammar Check and Copyright Approval & Title/Author Search
The editing staff performs the following:

- reviews selections for grammar, punctuation, and spelling;
- determines if the selection is public domain, gratis, or copyrighted (if copyrighted, determine whether the publisher may be used or if there is a problem, such as excessive expense); and
- searches all selection databases to determine if the selection is already in use.

Step 3: Content Reconcile
Issues noted in Copyright reviews are reconciled by a Content Specialist. The Content Specialist reviews once more to ensure that the selection has

- alignment to grade-level expectations;
- appropriate content, selection length, readability; and
- contains no bias or sensitivity or copyright concerns.

Based on review/reconciliation, the Content Specialist can

- approve the selection as is and move to **Step 5** or
- send the selection to **Step 4 Production** for edits or additions, including artwork. (If any edits or additions are made to the selection including edits to or addition of artwork, the Content Specialist sends a new copy to the Copyright Staff so they can seek permission from the publisher if copyrighted.)

Step 4: Production Edits
Production staff makes edits to artwork. Once revisions are made, the selection is sent back to **Step 3** for another review by a Content Specialist.

Step 5: Alternate Test Lead Review
The Alternate Test Lead evaluates the selection for accessibility concerns for EC, EL, and VI students in terms of

- accessibility for students with significant cognitive disabilities;
- content and length of the selection;
- readability of the selection;
- bias or sensitivity issues, such as contexts that might elicit an emotional response and inhibit students' ability to respond and contexts that students may be unfamiliar with for cultural or socioeconomic reasons;
- accessibility of graphics for students with or without vision;
- appropriateness for Brailling;
- prior knowledge required to understand the selection; and
- unfamiliar vocabulary that cannot be understood from the surrounding context.

Any suggested edits are noted on the selection. Based on the review, the Alternate Test Lead can recommend to

- use the selection,
- use the selection with suggested edits, or
- not use the selection.

Step 6: Content Reconcile
Any issues noted in the Alternate Test Lead review are reconciled by a Content Specialist.

NOTE: If any edits or additions are made to the selection (including edits to or addition of artwork), the Content Specialist sends a new copy to the Copyright Staff so they can seek permission from the publisher if copyrighted. Selections needing revision outside the technical scope of the Content Specialist are revised by Production Staff at **Step 7**.

Step 7: Production Edits
Production staff makes edits to artwork. Once revisions are made, the selection is sent back to **Step 6** for another review by a Content Specialist.

Step 8: Test Measurement Specialist Final Review
The Test Measurement Specialist (TMS) evaluates the selection for

- alignment to grade-level expectations,
- content and length of the selection,
- readability of the selection, and
- bias or sensitivity concerns.

The TMS also evaluates any bias or sensitivity concerns raised by the Alternate Test Lead review and edits made by Content at **Steps 1 and 3.** If the TMS rejects the selection, it is deleted from the pool. If the TMS approves the selection, then it moves to **Step 9**.

Step 9: Selection Approved Selection is now ready to have items written to it.

Alternate Assessment Selection Review

Legend
- Content Specialist
- Editing
- Production
- DPI TMS
- Alternate Assessment Lead

Step 01 Selection Entered
→ **Step 02** Grammar → Selection Rejected
→ **Step 03** Reconcile ←-- Edits/Done --→ **Step 04** Production
→ **Step 05** Alternate Assessment Lead → Selection Rejected
→ **Step 06** Reconcile ←-- Edits/Done --→ **Step 07** Production
→ **Step 08** TMS Final Review → Selection Rejected
→ **Step 09** Selection Approved
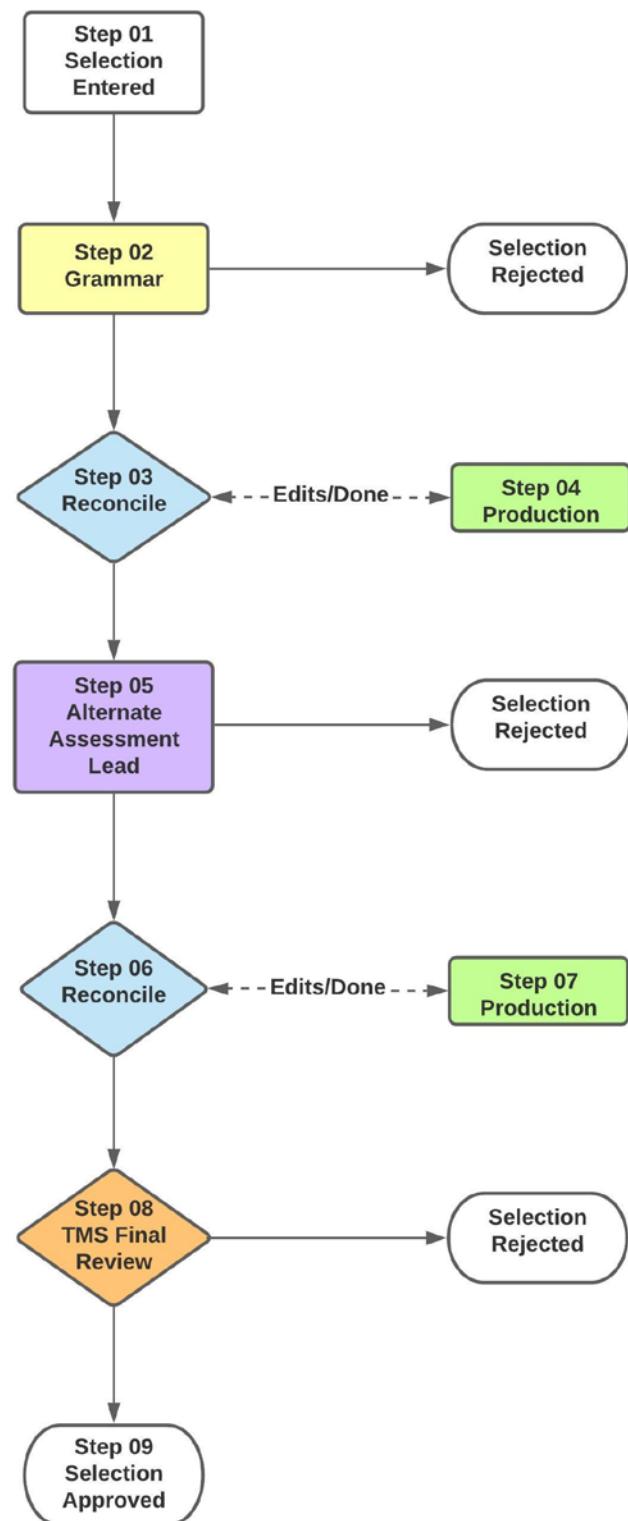
Form Review Process for the *NCEXTEND1* Alternate Tests

Prior to Step 1: Psychometrician reviews the test items for the initial placement in the form, taking key balance into consideration.

Step 1: Select Item Numbers
A Psychometrician selects/approves the items to populate the form. The Psychometrician can send the form to **Step 2** (Production Edits) for revisions to artwork, graphs, or reading selections, if needed, or sends the form to **Step 3** for content review. If needed, the Psychometrician approves any item replacement or revisions.

Step 2: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 1** for review by the Psychometrician.

Step 3: Form Review/Reconciliation
A Content Specialist reviews the items on the form for content alignment and quality of content, and reviews the form for conflicts or repetition of content.

If any items need to be replaced due to concerns regarding conflicts or repetition of content among items, or for quality concerns, the Content Specialist sends the form back to **Step 1** with comments for the Psychometrician. If revisions are needed to items such as artwork, graphs, and reading selections, the form is sent to **Step 4** for production edits. Otherwise, the form is sent to **Step 5**, Test Measurement Specialist (TMS) review.

Step 4: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 3**.

Step 5: Test Measurement Specialist Review
This review step is conducted to ensure that the form is ready for Outside Content Key Check (i.e., the form is ready for students) and considers both item- and form-level quality with the following sequence:

- The TMS will submit a review for each item, including any comments. Suggestions for revisions to items should be made only when necessary.
- After reviewing the quality of each item, the form should be evaluated in terms of cueing, repetition, and content coverage.
- The key balance of the form is checked. If the key balance is poor, the TMS will suggest which items' foils to reorder and what the key ought to be. Any suggestions for key balance edits must be approved by the Psychometrician. The form is then returned to **Step 1**.

After reviewing each item, the TMS can add form-level comments and suggested improvements, and can

- send the form back to **Step 1** with suggestions for replacements or revisions,
- move the form to **Step 6** (Reconcile), or
- delete the form from the pool.

Step 6: Reconcile
At this step, the form is ready for Outside Content Key Check. The Content Specialist should review the form comments to ensure any suggested replacements or revisions have been addressed and that any approved replacements or revisions have been made correctly. If any replacements or revisions were made incorrectly, the Content Specialist moves the form back to **Step 1** with comments. If any revisions are needed to artwork, graphs, or reading selections the form is sent to **Step 7** (Production Edits). Otherwise, the form moves to **Step 8** (Outside Content Key Check).

Step 7: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 6** for review by a content specialist.

Step 8: Outside Content-Specific Expert Review and Key Check
An Outside Content Specialist reviews the form by answering each item and providing any comments and/or suggestions. (Outside content-specific experts are not involved in creating any item. They are not affiliated with NCDPI or NCSU-TOPS agencies and serve as objective, independent reviewers. These experts must have verified credentials and experience in their subject matter area and be approved by NCDPI as content experts.).

Step 9: Reconcile Outside Content-Specific Expert Review
Content Specialist checks the keyed response from the Outside Content-Specific Expert Review against the key for each item and reviews all comments and/or suggestions from the Outside Content-Specific Expert. Any key disagreements are reconciled, and comments and/or suggestions from the Outside Content-Specific Expert are addressed. Forms needing revision outside the technical scope of the Content Specialist are revised by Production at **Step 10**.

Step 10: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 9** for review by a Content Specialist.

Step 11: Psychometric Review/Key Balance
A Psychometrician performs the following:

- reviews comments/suggestions from the Outside Content-Specific Expert and from Editing staff, with consultation with the TMS and Content Specialists;
- checks key agreement with the Outside Content-Specific Expert and resolves any disagreements through consultation with the TMS and Content Specialists;
- makes any approved revisions, or indicates revisions for Production staff to make, and sends the form to **Step 12** (Production Edits); and
- checks the key balance.

Step 12: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 11** for review by the Psychometrician.

Step 13: Grammar Review
An editor reviews the form for grammatical and/or formatting issues, providing comments and/or suggestions as needed.

Step 14: Reconcile Grammar Review

A Content Specialist reviews the form and reviews all comments from Editing staff and addresses any suggestions. Forms needing revision outside the technical scope of the Content Specialist are revised by Production at **Step 15**. If no corrections are need, the form moves to **Step 16** for review by the Alternate Test Lead.

Step 15: Production Edits
Revisions to embedded experimental items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 14** for review by a Content Specialist.

Step 16: Alternate Test Lead Review
The Alternate Test Lead reviews the comment history to ensure all comments have been addressed in terms of assessing students with significant cognitive disabilities. The Alternate Test Lead may choose one of the following options:

- Approve the form and move it to **Step 17** (Test Measurement Specialist Final Review).
- Send the form back to **Step 14** (Content Specialist Review) if revisions are requested.

Step 17: Test Measurement Specialist Final Review
The TMS reviews the form, considering the comments from the **Step 16** review to ensure all comments have been addressed properly. The key balance of the form is checked. The TMS makes any needed edits to items. Then the TMS sends the form to **Step 19** (Final Grammar). Forms needing revisions to artwork, graphs, and reading selections are sent to Production at **Step 18**.

Step 18: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 17**.

Step 19: Final Grammar Review
An editor reviews the form for grammatical and/or formatting issues, providing comments and/or suggestions as needed.

Step 20: Final Manager Review
A Content Manager reviews comments/suggestions from the Grammar Review and makes any necessary revisions. The Manager checks the form for overall quality and reviews the form comment history to ensure all comments have been addressed. After reviewing the form, the Content Manager may choose one of the following options:
- Approve the form and send it to **Step 22**.
- Send the form to **Step 11** (Psychometrician) if there are suggested revisions to operational items for the Psychometrician to consider.
- Send the form to **Step 21** (Production Edits) for revisions to artwork, graphs, or Reading selections.
- Reject the form.

Step 21: Production Edits
Revisions to items such as artwork, graphs, and reading selections are made by Production staff. Once the revisions are made, the form is sent back to **Step 20**.

Step 22: Export and Step 23: Final Freeze
The form is exported to paper. The form, all items, and any selections are operationally locked to prevent any revisions. This is to ensure that the published versions of the form, items, and selections are preserved electronically.

Step 24: Form Approved
The form is approved for administration.

Last Revised: February 8, 2021

Moving foils require approval.
Routing sheet must be completed.

**Alternate Assessment
Form Review**

Legend	
🟪	Alternate Assessment Lead
🟥	Content Manager
🟦	Content Specialist
🟨	Editing
🟪	Outside Content
🟩	Production
🟪	Psychometrician
🟧	TMS

Step 01
Upload Form — –Edits needed– → Step 02 Production

Step 03
Form Review — –Edits needed– → Step 04 Production

Step 05
TMS Review

Step 06
Reconcile — –Edits needed– → Step 07 Production

Step 08
OC

Step 09
Reconcile — –Edits needed– → Step 10 Production

Step 11
Psy Review — –Edits needed– → Step 12 Production

Step 13
Grammar

Step 14
Reconcile — –Edits needed– → Step 15 Production

Step 16
Alternate Assessment Lead

Step 17
TMS Final Review — –Edits needed– → Step 18 Production

Step 19
Final Grammar

Step 20
Final Manager Review — –Edits needed– → Step 21 Production

Step 22
Export

Step 23
Final Freeze/Export

Step 24
Form Approved

V.A-09: Online Item Writer Training Sample

TD101A: Test Development Basics

Your progress ?

Introduction

The design of these courses is generally linear, requiring the online trainee to step through each resource (Web page, PDF, etc.) in a structured sequence. At the end of most topic areas, trainees are required to take a short quiz to demonstrate understanding of the presented material before moving to the next topic area. All online quizzes may be taken as many times as needed in order to meet the requirements for moving forward in the course. Once trainees have viewed a resource, they are able to return to it for reference at any time.

This course provides an overview of the test development process and the basic rules and structures of item formats allowed by the North Carolina Testing Program.

Upon completion of this short course, those interested in item writing and/or reviewing should complete the sequence of one of the B-level courses covering cognitive taxonomies used in writing and reviewing assessment items. Finally, trainees will need to complete one or more of the C-level, subject-specific courses that provide an overview of the individual subject standards. After completion of the required courses, trainees can submit an application to be an item writer/reviewer for the NCDPI.

The TD101A self-directed course should take approximately one (1) hour to complete. Upon successful completion, trainees will be provided enrollment keys for the B-level courses on cognitive taxonomies.

The Test Development Process

- Test Development Overview ☑
- Multiple-Choice Test Development Process ☑
- Test Design and Item Types ☑
- System for Submitting/Reviewing Items ☑

Multiple-Choice Item Writing

- Multiple-Choice Item Writing Guidelines ☑
- Universal Design for Learning and Assessment ☑
- Basic Terminology ☑
  - Test Item Format - Question Format ☑
  - Test Item Format - Best Answer Format ☑
  - Stem ☑
  - Foils ☑
  - Charts and Graphs ☑
  - Avoid Complexity ☑
  - Minimize Wording ☑
  - Use of Third Person ☑
  - Positive Wording ☑
  - "Of the following . . ." ☑
  - Use Correct Language Conventions ☑
  - Do Not Use Contractions or Abbreviations ☑
  - Avoid Misleading Items and Clang Association ☑
  - Do Not Use Humor ☑
  - Diversity ☑
  - Considerations for Students with Disabilities ☑
  - Considerations for Students Who Are English Learners ☑
- Content Guidelines ☑
- Item Writing & General Guidelines Quiz ☐

Fairness and Sensitivity

📄 Guidelines for Bias/Sensitivity in Item Writing ☑

📄 Questions to Ask Before Submitting An Item ☑

📄 Common Language ☑

📄 Avoid Stereotypes ☑

📄 Avoid Offensive Content ☑

📄 Socioeconomic/Family Sensitivity ☑

📄 Artwork ☑

Security and Copyrights

📄 Security and Copyrights ☑

📄 About the Testing Code of Ethics ☑

📄 North Carolina Testing Code of Ethics ☑

📄 Test Security Agreement ☑

📄 Ownership of Items Authored ☑

📄 Avoid Trademarks ☑

📄 Work Site Security Issues ☑

✔ Security and Copyrights Quiz ☑

Next Steps

📄 Accessing the TD101B Series Courses

   Restricted Not available unless: You achieve a required score in **Security and Copyrights Quiz**

📄 Certificate of Completion ☑

TD101A: Test Development Basics

Test Development Overview

North Carolina tests are standards-based, criterion-referenced achievement tests designed to measure student performance with respect to the North Carolina *Standard Course of Study*. Whenever content standards are created or revised and then adopted and approved by the North Carolina State Board of Education (SBE), the test development process begins. The test development process consists of six phases, beginning with the development of test specifications and ending with the reporting of operational test results at the student, school, district, and state levels.

Last modified: Friday, March 29, 2019, 2:19 PM

Previous: Next: Multiple-Choice Test Development Process

Multiple-Choice Test Development Process
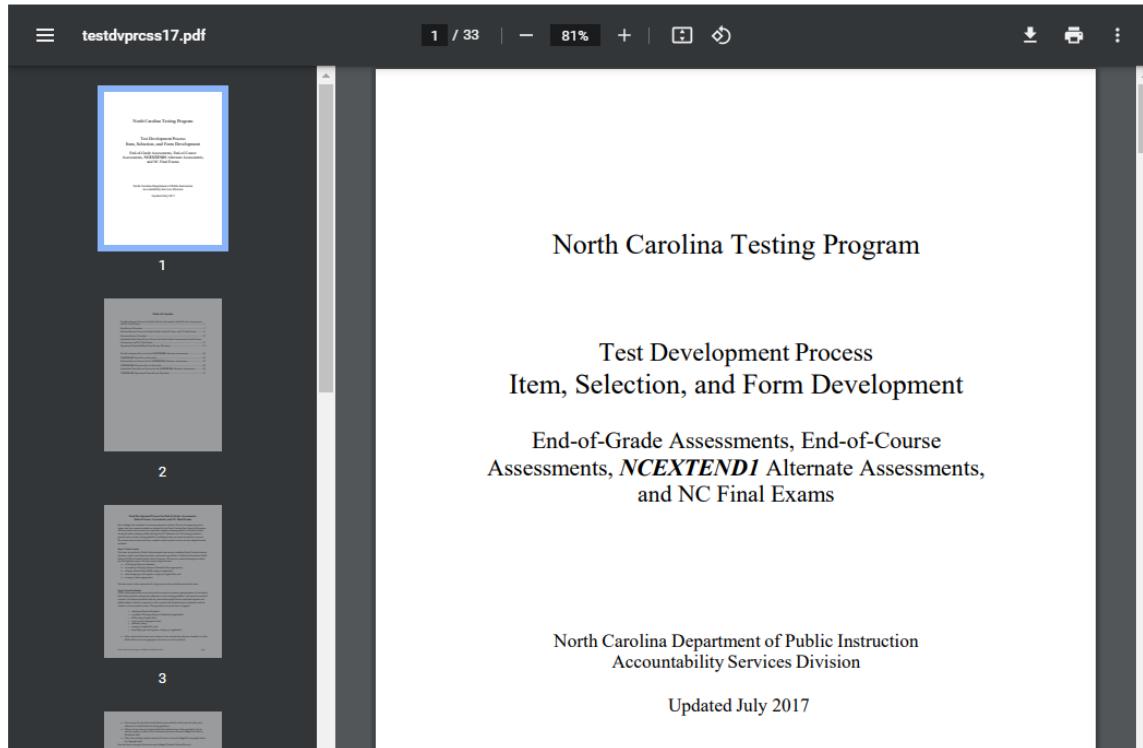
Test Design and Item Types

As North Carolina periodically revises the *Standard Course of Study* and Essential Standards, stakeholders and leaders reflect on the knowledge and skills necessary for student success in each content area and grade. Once the new standards are adopted by the State Board of Education, new assessments are designed to effectively measure what students know and are able to do.

Last modified: Friday, March 3, 2017, 8:01 AM

System for Submitting/Reviewing Items

Items are submitted through an online platform known as the Test Development System, or TDS for short. Item writers are assigned contracts through the TDS. The contract will consist of the standards or selections assigned to the writer and the number of items per standard/selection. All items written for the North Carolina Testing Program are submitted through the TDS.

The item review process for teachers also takes place within the TDS. Item reviewers have a secure login to access item queues for each subject and/or grade level. Each item recieves an independent review from multiple reviewers who answer a checklist of questions.

Last modified: Tuesday, June 23, 2020, 7:58 AM

TD101A: Test Development Basics

Multiple-Choice Item Writing Guidelines

The North Carolina Testing Program has created test item guidelines to ensure uniformity and application that falls within the scope of high-stakes testing programs to which item writers must adhere. The information presented in this training addresses these item writing guidelines as they apply to the North Carolina Testing Program.

The following resources (1) explain the guidelines for writing items and (2) provide examples of weak items and improved items.

At the conclusion of this topic, there will be a quiz to assess understanding and application of the guidelines.

This topic content was adapted from *Developing and Validating Multiple-Choice Test Items* by Thomas M. Haladyna, 1994, 1999, 2004.

Last modified: Friday, March 29, 2019, 2:27 PM

Previous: System for Submitting/Reviewing Items   Next: Universal Design for Learning and Assessment

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TD101A: Test Development Basics

Universal Design for Learning and Assessment

What is Universal Design?

The concept of Universal Design originated in architecture with the goal to provide maximum accessibility and usability of buildings, outdoor spaces, and living environments. This concept is centered on the belief that our environments should be accessible and usable by everyone, regardless of their age, ability, or circumstance. When applied to learning and assessment, Universal Design centers around development and creation of learning environments and assessments that are accessible and usable by all students, including students with disabilities and students who are English Learners.

The North Carolina Department of Public Instruction (NCDPI) is committed to the creation of summative assessments that incorporate Universal Design principles.

Why is this important?

North Carolina's student population is diverse. Students have varied life experiences; economic and family situations; religions; dietary preferences and restrictions; recreational opportunities; and exposure to popular culture and consumer products. Assessments that incorporate Universal Design principles allow students to demonstrate proficiency on tested content regardless of the students' background, gender, race, disability, etc.

Last modified: Wednesday, May 24, 2017, 10:32 AM

Previous: Multiple-Choice Item Writing Guidelines   Next: Basic Terminology

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TD101A: Test Development Basics

Basic Terminology

- Stem - the question, including text, charts/graphs,
- Foils - the answer choices
- Distractors - the incorrect answer choices
- Key - the correct answer
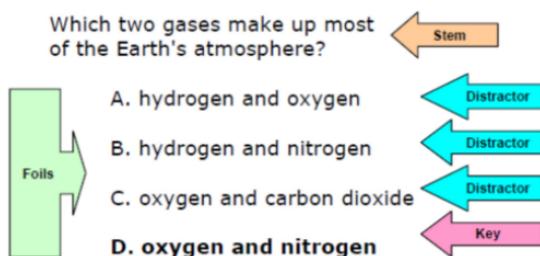
Last modified: Tuesday, June 23, 2020, 8:06 AM

Previous: Universal Design for Learning and Assessment   Next: Test Item Format - Question Format

TD101A: Test Development Basics

Test Item Format - Question Format

- All multiple choice items must be written in question format (not fill-in-the-blank or completion).
- What is being asked must be clear to the student.
- Any directions must be simple and clear.

Weak Item	Improved Item
The first permanent English settlement in North America was	Which was the first permanent English settlement in North America?
A. St. Augustine	A. St. Augustine
B. Santa Fe	B. Santa Fe
C. Jamestown	**C. Jamestown**
D. New Amsterdam	D. New Amsterdam

Last modified: Tuesday, June 23, 2020, 8:07 AM

Previous: Basic Terminology

Next: Test Item Format - Best Answer Format

TD101A: Test Development Basics

Test Item Format - Best Answer Format

- There must be one correct response.
- Distractors (incorrect answer choices) must be incorrect, but plausible.

Weak Item	Improved Item
Look at the diagrams below. They show what happened when two solid blocks were each put in a jar containing a liquid.	Look at the diagrams below. They show what happened when two solid blocks were each put in a jar containing a liquid.
Based on the diagrams, what can be concluded?	Based on the diagrams, what can be concluded?
A. The block in jar 1 is heavier than the block in jar 2.	A. The blocks in both jars are made of wood.
B. The blocks in both jars are about the same size.	B. The blocks in both jars are made of plastic.
C. The block in jar 1 is floating lower in its liquid than is the block in jar 2.	**C. The block in liquid 1 has almost the same density as the liquid.**
D. The block in jar 1 must be made of metal, and the block in jar 2 must be made of wood.	D. The block in liquid 2 is more dense than the liquid.
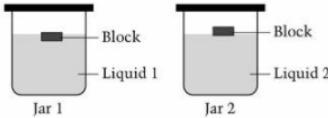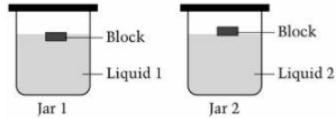
In the weak item, distractor B is also arguably a correct response. Also in the weak item, distractors A and D are implausible. In the improved item, distractors A, B, and D are all incorrect responses but are plausible in that they represent common student errors.

Last modified: Wednesday, February 22, 2017, 1:34 PM

Previous: Test Item Format - Question Format

Next: Stem

TD101A: Test Development Basics

Stem

- Write the items so that the central idea and any common elements are included in the stem instead of the foils.
- Place the question sentences in as close proximity to the foils as possible.
- Use qualifying words in a stem when they are needed to emphasize the "best answer." Words such as "best" and "most likely," should appear in bold italics. Reading items should *not* use qualifying words.

Weak Item	Improved Item
Which shape will always have at least one right angle?	Which shape will *always* have at least one right angle?
A. A square will always have at least one right angle.	**A. square**
B. A triangle will always have at least one right angle.	B. triangle
C. A trapezoid will always have at least one right angle.	C. trapezoid
D. A quadrilateral will always have at least one right angle.	D. quadrilateral

In the weak item, the qualifying words are not bolded and italicized, and the central idea in the stem is repeated in the foils. The improved item bolds and italicizes the qualifying words and removes the repeated central idea from the foils.

Last modified: Tuesday, June 23, 2020, 8:10 AM

Previous: Test Item Format - Best Answer Format
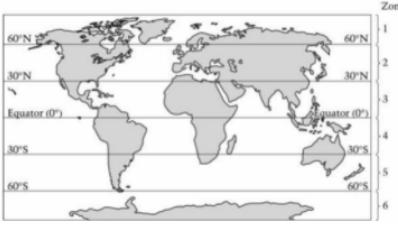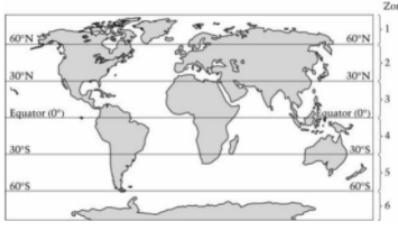
Next: Foils

TD101A: Test Development Basics

Foils

- Multiple-choice items for general assessments must contain four foils (A, B, C, D).
- Multiple-choice items for NCEXTEND1 assessments must contain three foils (A, B, C).
- Answer choices should be ordered logically, such as ascending or descending value for numbers; the order in which the words appear in a chart; chronological order; etc.
- Foils that use quotes from a selection should be ordered as presented in the selection.
- If the foils are fragments, please do not capitalize or use end marks. If the foils are sentences, please use a capital letter to start the sentence, and finish it with an end mark.
- Foil length must be balanced. At least two foil lengths must be nearly the same so that one of the four foils does not stand out. The lengths do not need to be exactly the same, but if one is extremely long or short, it can cause the student to choose the answer for that reason alone.

Weak Item	Improved Item
This map represents different zones of the world based on latitudes.	This map represents different zones of the world based on latitudes.
Which zones in the map *most likely* have warm summers and cold winters?	Which zones in the map *most likely* have warm summers and cold winters?
A. 2 and 4	A. 1 and 4
B. 2 and 5	B. 2 and 4
C. 3 and 6	**C. 2 and 5**
D. 1 and 4	D. 3 and 6

In the improved item, the foils follow the order in which the zones appear in the map.

- Foils should be independent and not overlapping.

Weak Item	Improved Item
How much does a Channel Bass usually weigh?	How much does a Channel Bass usually weigh?
A. up to 75 pounds	A. over 100 pounds
B. less than 100 pounds	B. between 60 and 80 pounds
C. between 30 and 40 pounds	C. between 30 and 40 pounds
D. more than 30 pounds	D. less than 20 pounds

In the weak item, a fish that weighed 35 pounds would be the correct response for A, B, C, and D.

- To the extent possible, foils for an item should be homogeneous in content and length.
- *All of the above, none of the above, I don't know* are not used as foils.
- Word the foils positively; avoid any negative phrasing.
- Avoid providing clues to the correct response.
- Avoid writing items in which phrases in the stem are repeated in the foils.

- Avoid specific determiners because they are so extreme that they are seldom the correct response. To the extent possible, specific determiners such as ALWAYS, NEVER, TOTALLY, and ABSOLUTELY should not be used when writing items.
-

Weak Item	Improved Item
What *most likely* happens when consumers increase their purchases of goods and services?	What *most likely* happens when consumers increase their purchases of goods and services?
A. **Businesses will increase production, and workers will receive more income.**	A. **Businesses will increase production, and workers will receive more income.**
B. Businesses will never increase production, and workers will receive less income.	B. Businesses will increase production, and workers will receive less income.
C. Businesses will decrease production, and workers will always receive more income.	C. Businesses will decrease production, and workers will receive more income.
D. Businesses will decrease production, and all workers will receive less income.	D. Businesses will decrease production, and workers will receive less income.

The weak item has specific determiners in distractors B, C, and D ("never," "always," and "all" respectively). The improved item eliminates these errors.

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TD101A: Test Development Basics

Charts and Graphs

- Charts and graphs should be clearly marked and labeled to ensure the necessary information is accessible to all students.
- Do not use the letters A, B, C, or D on charts and graphs (these letters are reserved to identify foils).
- When labeling artwork or graphics, do not spell words (such as F, L, A, and G to label the points of a rectangle).
- Refer specifically to the chart/graph that is included in an item. For example, "Bob made this chart . . ."
- Introductory information should appear above the chart/graph. The sentence asking the question should appear below the chart/graph.
- Charts and graphs should be original or copyright free.

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TD101A: Test Development Basics

Avoid Complexity

Avoid writing complexly formatted items. Item structure should not be confusing to students.

Weak Item	**Improved Item**

Weak Item

Which are symbols of North Carolina?

I. cardinal	**II. honeybee**
III. Boykin spaniel	**IV. dogwood**

A. I and III only

B. II and III only

C. III and IV only

D. I, II, and IV only

Improved Item

Which are symbols of North Carolina?

A. cardinal and fire ant

B. Boykin spaniel and shad boat

C. dogwood and soda

D. honeybee and Plott hound

In the weak item, the foils require the student to translate the Roman numerals to the information in the stem. This item format can cause the student to process complex information unrelated to the content. The improved item tests the student's knowledge directly.

Last modified: Tuesday, June 23, 2020, 8:20 AM

Previous: Charts and Graphs

Next: Minimize Wording

TD101A: Test Development Basics

Minimize Wording

- Avoid excessive wordiness and use of irrelevant information.
- Use simple or compound sentences.
- Avoid unusual or low frequency words and replace them with common words.

Weak Item

Newspaper classified ads usually contain three types of information: phone number, item description, and item cost. What is the role of classified advertising in market economies?

    A. to increase competition between imports and local goods and services
    B. to inform consumers of available products and services
    C. to convert production costs into corporate profits
    D. to enhance spending and nationwide consumption

Improved Item

What is the role of classified advertising in market economies?

    A. to increase competition between imports and local goods and services
    B. to inform consumers of available products and services
    C. to convert production costs into corporate profits
    D. to enhance spending and nationwide consumption

The weak item provides information in the stem that is unnecessary to answer the question.

Last modified: Friday, March 3, 2017, 8:08 AM

Previous: Avoid Complexity

Next: Use of Third Person

TD101A: Test Development Basics

Use of Third Person

Items should be written in third person (he/she/it).

Weak Item	Improved Item
Why do you think the author included the quotation from the city manager complimenting Ellen's report?	Why did the author include the quotation from the city manager complimenting Ellen's report?
A. to show how Ellen saves money	A. to show how Ellen saves money
B. to describe Ellen's feelings	B. to describe Ellen's feelings
C. to emphasize Ellen's achievement	**C. to emphasize Ellen's achievement**
D. to explain why Ellen lives in the city	D. to explain why Ellen lives in the city

The weak item contains the pronoun "you" in the stem. The improved item removes this pronoun.

Last modified: Wednesday, February 22, 2017, 1:44 PM

TD101A: Test Development Basics

Positive Wording

Items should be worded positively. Avoid using negative words such as "not" and/or "except."

Weak Item	Improved Item
Which is not a part of Darwin's Theory of Evolution by natural selection?	Which is a part of Darwin's Theory of Evolution by natural selection?
A. Individuals in a population vary in many ways.	A. There is almost no variance among individuals in a population.
B. Some individuals possess features that enable them to survive better than individuals lacking those features.	B. **Some individuals possess features that enable them to survive better than individuals lacking those features.**
C. More offspring are produced than can generally survive.	C. Less offspring are produced than can generally survive.
D. **Changes in an individual's genetic material are usually harmful.**	D. Changes in an individual's genetic material are usually harmful.

Notice that in order to provide a single correct answer, the foils above required rewording when changed from negative to positive phrasing.

Last modified: Tuesday, December 6, 2016, 10:17 AM

TD101A: Test Development Basics

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"Of the following . . ."

"Of the following" should only be used when the best possible answer is not available as a foil. This question type is not used in Reading items.

Weak Item	**Improved Item**

Which of the following is an example of genetic engineering?

   A. growing a whole plant from a single cell
   B. finding the sequences of bases in plant DNA
   C. inserting a gene into plants that makes them resistant to insects
   D. attaching the root of one type of plant to the stem of another type of plant

Which choice is an example of genetic engineering?

   A. growing a whole plant from a single cell
   B. finding the sequences of bases in plant DNA
   C. inserting a gene into plants that makes them resistant to insects
   D. attaching the root of one type of plant to the stem of another type of plant

In the improved item above, "of the following" is simply removed from the stem because it is unnecessary. BUT "of the following" may be appropriate for certain items. Compare this item to one *with* and *without* the best possible answer (Fluorine):

Weak Item	**Improved Item**

Which of the following elements is the *most* electronegative?

   A. **Fluorine**
   B. Chlorine
   C. Carbon
   D. Sodium

Which of the following elements is the *most* electronegative?

   A. **Chlorine**
   B. Carbon
   C. Sodium
   D. Gold

In the weak item, "of the following" is not needed and should be removed from the stem because the best possible answer, fluorine, is available as a foil. In the improved item, the best possible answer, fluorine, is not made available. Therefore, "of the following" should be used to clarify that the focus of the item is the most electronegative element — *from those available*.

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TD101A: Test Development Basics

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Use Correct Language Conventions

- Use correct grammar, punctuation, and spelling.
- Make pronoun references clear.

Weak Item	**Improved Item**
Maria had 5 bags of marbles. Each bag had 12 marbles. She gave 2 of them to Joe. How many marbles did Maria have left?	Maria had 5 bags of marbles. Each bag had 12 marbles. She gave 2 bags of marbles to Joe. How many marbles did Maria have left?
A. 60	A. 60
B. 36	**B. 36**
C. 24	C. 24
D. 19	D. 19

In the weak item, it is unclear whether 2 of them refers to 2 marbles or 2 bags of marbles. An answer of 58 would also be reasonable for the weak item. The improved item makes it clearer that Maria is giving 24 marbles to Joe.

Last modified: Friday, March 3, 2017, 8:10 AM

Do Not Use Contractions or Abbreviations

Contractions and abbreviations limit accessibility for students who are English Learners and students with disabilities. Contractions and abbreviations are not used in formal writing.

For example, use

"I cannot see you" instead of "I can't see you."

"We will not go home" instead of "We won't go home."

"We will visit the United States" instead of "We will visit the U.S."

Contractions may be found in Reading items in which quotes from the selection are used. The contractions are used to match the wording of the selection and follow copyright permissions.

Last modified: Tuesday, June 23, 2020, 8:25 AM

Avoid Misleading Items and Clang Association

Weak Item	Improved Item
What is the state bird of North Carolina?	What is the state bird of North Carolina?
A. Carolina wren	A. hummingbird
B. seagull	B. seagull
C. blue jay	C. blue jay
D. **cardinal**	D. **cardinal**

In the weak item, Distractor A is misleading because it repeats a word in the stem. The use of "Carolina" in both the stem and the distractor may mislead students into selecting "A" as the correct answer. When foils have wording that resembles or is identical to the wording in the stem, it is referred to as **clang association**.

Weak Item	Improved Item
From what location was the Union Jack originally flown?	From what location was the Union Jack originally flown?
A. the jack staff of a ship	**A. the staff at the rear of a ship**
B. the roof of Buckingham Palace	B. the roof of Buckingham Palace
C. the top of the Big Ben clock	C. the top of the Big Ben clock
D. the caboose on a train	D. the caboose on a train

In the weak item, the use of "jack" in both the stem and the correct response may lead students to select "A" as the correct answer. In this example, the **clang association** helps the student who otherwise might not know the correct answer.

Last modified: Tuesday, June 23, 2020, 8:26 AM

Do Not Use Humor

Avoid the use of humor in the stem and foils. Humor may be distracting and is an accessibility concern for English Learners.

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Diversity

To reflect an awareness of the diversity of the student population:

- Use names from a variety of ethnic groups, such as José, Min, or Susie.
- Do not present stereotypical images of cultures, religions, ethnic groups, or gender groups. For example: "Girls do not like sports" or "Boys are better at math." Not all girls dislike sports, and not all boys are good at math.

Last modified: Friday, March 29, 2019, 2:39 PM

Previous: Do Not Use Humor | Next: Considerations for Students with...

Considerations for Students with Disabilities

Organization
Consider how words, charts, and other visuals are arranged.

- Stems should begin with a sentence before any graphic or chart is presented.
- Graphics and charts should have a title.
- Avoid long stems by breaking up the sentences into list form (use bullets).
- Paragraph references should be placed as close to the end of the stem as possible.

Vocabulary
- Use the easiest, shortest words to convey the meaning.
- Avoid confusing names and unusual spellings.
- Use clear and concise language.
- Use short, common names from various cultures.

Sentence Structure
- Use simple sentences.
- Avoid complex sentences.
- Break ideas down into their simplest units.

Unusual Formats
- Try to be as clear and straightforward as possible.
- Could the arrangement confuse someone? Do the visuals make sense? Is there enough space around visuals so that they are easy to keep separate?

Use of Numbers and Letters in Responses
Be sure that it is clear which numbers and letters are part of the stem and which are part of the foils when using graphs or charts.

Specific things to remember:
a) Avoid using the phrase "of the following." The phrase can be troublesome for students with disabilities, especially students who are deaf. Try to use "Which _____ is . . ." or "Which is . . ." rather than "Which of the following is . . ." or "Which of the following _____ is . . ."

b) Avoid using the phrase "According to the chart . . ." A phrase such as "using the _____ . . ." should be used to direct the student to use a particular chart/graph when answering a question.

c) Refer to a chart/graph that is included in an item. For example, use "Bob made this chart . . .".

Last modified: Tuesday, June 23, 2020, 8:30 AM

Previous: Diversity | Next: Considerations for Students Who Are...

TD101A: Test Development Basics

Considerations for Students Who Are English Learners

- Avoid words or phrases that do not have a clear translation: "get along."

- Avoid confusing student names: "April," "May," "June," "Paris," "Drew," etc.

- Avoid multimeaning words: "fair" (okay, just, light, good weather, State Fair), "make" (create, earn, brand of car, cause to happen, prepare).

- Avoid local and regional expressions such as "put down" (insult), "put up with" (preserve/endure), "put off" (delay), etc. These are colloquial and are deceptively easy to read but difficult to understand. If a student who is an English Learner were to look up each word separately in most bilingual dictionaries, he/she would not find an accurate definition of the term.

- Avoid verbs with two parts: "make up", "sit down", "take off", etc.

- Avoid using the passive voice, which can pose a challenge for English-learners. The passive voice means that the subject is a recipient of the verb's action. (The game of tag was played by Christopher and his friends.) Instead, use the active voice. The active voice means that a sentence has a subject that performs the action of the verb. (Christopher played tag in the playground.)

Weak item:	Improved item:
Tyrone made $85 Monday. He made $75 Tuesday.	Tyrone earned $85 Monday. He earned $75 Tuesday.
How much money did he make altogether?	How much money did he earn altogether?

In the weak item, the meaning of "made $85" may be unclear to some students. Using "earned" instead of "made" is more precise and is easier for the student to understand.

What to avoid:

Generalizing Not all students who are English Learners are Spanish speakers.

Confusing student names "April," "May," "Drew," etc.

Complex sentences Several simple sentences are better.

Confusing modifiers "hardly" (hard/soft), "scarcely"

Contractions "would've," "could've," "should've," "didn't"

Sports references Sports vocabulary often includes common words with specialized meanings. The terminology is so much a part of our culture that we fail to recognize that an understanding of American sports is not universal. Some examples include: "home plate," "base hit," "ball," "strike," "foul ball," "strike out," "run," "pitcher," "fly ball," "back," "end," "out," "down," "rebound," etc.

Less common names for foods and flavors Rocky road, moose tracks, and cookies and cream may not be understood. Use common flavors instead – chocolate, vanilla, etc.

Misleading names for businesses Flying Pizza, Super Wheels, and Joe's Eats will be confusing. Use the words "restaurant," "company," "shop," "store," etc. whenever possible.

Implied understanding Example: the Constitution — which country's constitution?

Value judgments and customs Perceptions may depend on the student's customs and circumstances. Which is better — to earn a certain amount of interest in a savings account or to loan money to a family member? What clothing would be worn at 50 degrees Fahrenheit?

References to holidays and celebrations that may not be universal

Date and time Use the full names or proper abbreviations for days of the week and not just the first letters. When referencing time of day, specify a.m. or p.m.

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TD101A: Test Development Basics

Content Guidelines

- Item writers must be knowledgeable in the content area for which they are writing.
- Items must be aligned to the North Carolina *Standard Course of Study* or North Carolina Essential Standards and written for the appropriate grade level or course.
- The vocabulary in the items and the reading level must be consistent either with the expected grade level or within a 1 or 2 grade level range of the students tested.
- Use content-specific words that are directly related to content the student is expected to know.
- Incorrect answer choices (distractors) must be plausible choices.
- Item writers must be familiar with common misconceptions and mistakes students may make and use these to create plausible distractors.

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TD101A: Test Development Basics

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101A ▸ Multiple-Choice Item Writing ▸ Item Writing & General Guidelines Quiz

Item Writing & General Guidelines Quiz

For review purposes, this quiz covers content presented in this topic. Trainees have unlimited attempts to complete this quiz. Once they score well enough, they will get a link that allows them to move to the next course topic.

ONLY click the Previous Page and Next Page buttons while in the quiz. DO NOT click the Previous or Next links at the bottom of the page until the quiz has been successfully completed.

Grading method: Highest grade

Question 1
Not complete
Points out of 1.00
⚑ Flag question

Using the number designations in the example item below, answer the three questions.

Which is the state bird of North Carolina? (1)

(6) —
A. bluebird (2)
B. robin (3)
C. cardinal (4)
D. sparrow (5)

Which is the stem?   Choose... ▾

Which is the key?   Choose... ▾

Which are the foils?   Choose... ▾

Check

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TD101A: Test Development Basics

Question 2

Not complete

Points out of 1.00

⚑ Flag question

Which type of test item format presents [or has] only one correct response?

Select one:

- ○ a. Rubric Format
- ○ b. Best Answer Format
- ○ c. General Format
- ○ d. Depth of Knowledge Format

Check

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TD101A: Test Development Basics

Question 3

Not complete

Points out of 1.00

⚑ Flag question

When can above-grade-level vocabulary be used in an item?

Select one:

- ○ a. when it is appropriate to assess difficult content required by the standard
- ○ b. when content language is used
- ○ c. when students need to use complex reasoning strategies
- ○ d. when students demonstrate advanced skills

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Question 4

Not complete

Points out of 1.00

⚐ Flag question

Where is the *best* place to put the central idea and any common elements?

Select one:
- ○ a. in the foils
- ○ b. close to the interrogative
- ○ c. in the stem
- ○ d. along with qualifying words

[Check]

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Question 5

Not complete

Points out of 1.00

⚐ Flag question

Identify whether the words or phrases below are allowed or not allowed in foils.

none of the above   [Choose... ▾]

I don't know   [Choose... ▾]

always   [Choose... ▾]

all of the above   [Choose... ▾]

all but a and c   [Choose... ▾]

[Check]

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Question 6

Not complete

Points out of 1.00

⚑ Flag question

Why should the use of specific determiners in the foils be avoided?

Select one:
- ○ a. They make the distractors confusing.
- ○ b. They require italics when used.
- ○ c. They are seldom the correct answer.
- ○ d. They can create overlapping distractors.

Check

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TD101A: Test Development Basics

Question 7

Not complete

Points out of 1.00

⚑ Flag question

Why is it important to avoid "clang associations" when developing a multiple-choice item?

Select one:
- ○ a. to prevent the use of implausible foils
- ○ b. to avoid having overlapping foils
- ○ c. to prevent revealing the answer to the question
- ○ d. to avoid asking negative questions

Check

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Finish attempt ...

Previous: Content Guidelines

Next: Fairness, Bias and Sensitivity

TD101A: Test Development Basics

Fairness, Bias and Sensitivity

It is expected that groups of students with the same ability will have a similar probability of answering items correctly. Requiring specialized knowledge to answer a test item correctly is unfair.

Item development should ensure that industry standards for fairness, bias, and sensitivity are met so that the students, regardless of age, gender, disability, race, ethnicity, national origin, religion, linguistic background, or other characteristics (such as socioeconomic, regional, or cultural experiences), have equal opportunity for accessing the test items and that no child has an advantage or disadvantage because of the presentation or content of an item.

Items are reviewed for fairness, bias, and sensitivity before field testing. After field testing, statistical analysis of student performance with respect to gender, ethnicity, and socioeconomic background provides data to identify items for external bias review. If the review determines that an item is biased, it will be eliminated from the test item pool.

Bias is present in an item when

- an item measures membership in a group more than it measures content standards;
- an item contains information or ideas that are unique to the culture of one group or a particular socioeconomic background and are not part of the content standards;
- the item can be answered by a student who possesses certain background knowledge unrelated to the content standards.

Sensitivity issues occur when

- an item contains information that some students will find objectionable or will possibly produce a strong emotional response and/or is not part of the content standards such as blood, magic, snakes, spiders, death, etc.;
- an item contains contexts that students may be unfamiliar with because of cultural or socioeconomic reasons.

Last modified: Tuesday, June 23, 2020, 9:07 AM

TD101A: Test Development Basics

Guidelines for Bias/Sensitivity in Item Writing

- Avoid stereotypical references such as those related to gender, age, race, ethnicity, religion, physical ability, or geographic location (e.g., use "firefighter" instead of "fireman").
- Avoid jargon, slang, buzz words, idioms, or clichés.
- Refer to ethnicity, marital status, or gender only when necessary.
- Consider carefully any references that may give an advantage or disadvantage to students depending on their geographic location. Include the reference only if part of the content standards; otherwise, examine for bias.
- Avoid language that may be considered demeaning and/or offensive.
- Avoid requiring knowledge of words, activities, or events that may be limited to a region of the state of certain regions of the country and words that carry different meanings in different regions (e.g., barbecue, toboggan, hoagie, and silo).
- Avoid references to holidays and personal events such as birthday parties.
- Avoid catastrophic environmental events such as hurricanes, tornadoes, forest fires, and floods if this information is not part of the content standards being assessed.
- Avoid words with multiple meanings (e.g., bark, rails, jam, pool, squash, park).

Last modified: Friday, March 3, 2017, 8:23 AM

TD101A: Test Development Basics

Questions to Ask Before Submitting An Item

After having written a test item, it is important to reread what is written and ask each of these questions regarding fairness, bias, and sensitivity:

1. Does any element of the item contain any content that can result in a disadvantage for a student because of personal characteristics (such as race, gender, cultural background, or socioeconomic background)?
2. Does the language used in the item result in a disadvantage for a student because of personal characteristics?
3. Does the item contain language that is not commonly used statewide or has different connotations in different parts of the state or in different cultural or gender groups?
4. Does the item contain any local references that are not part of the content standards being assessed?
5. Does the item assume that all students come from the same socioeconomic background (e.g., suburban house with two-car garage)?
6. Is any element of the item presented in such a way as to offend a student because of personal characteristics?
7. Does the item have offensive, stereotyping, derogatory, or proselytizing religious references?
8. Does any element of the item contain language or content that reflects a stereotypical view of a group based on personal characteristics?
9. Does the item portray anyone in a stereotypical manner in regard to activities, occupations, emotions, etc.?

If the answer to any of the above questions is "yes," please revise the item and ask the questions again.

Once able to answer "no" to all of the above questions, ask these final two questions:

Fairness–Taken as a whole, is the item fair to all students, regardless of personal characteristics?
Diversity–Does the item appropriately include content that reflects a diverse population?

If the answer to these is "yes," then the item is ready to be submitted.

Last modified: Friday, March 3, 2017, 8:26 AM

Previous: Guidelines for Bias/Sensitivity in Item...   Next: Common Language

TD101A: Test Development Basics

Common Language

Items should only contain language that is commonly used. Do not use language that may have different meanings in different areas of the state, different regions of the country, or for different cultural or gender groups.

Examples

'toboggan' – may be reference either a sled or a hat

"pop" – can be referencing a soda or one's father or be used as a verb

"barbecue" – can be referencing an appliance used to cook food, a gathering at which food is cooked outdoors, or slow-cooked pork or beef that is pulled, chopped, or sliced

"dressing" – can be referencing a condiment for salads, a side item for an entree, or various materials used to cover a wound

"raining clams" – phrase used when sea gulls pick up and drop clams to try to crack them open; only people in the coastal/tidewater areas would know what this means

Last modified: Monday, April 1, 2019, 8:58 AM

Previous: Questions to Ask Before Submitting An Item   Next: Avoid Stereotypes

TD101A: Test Development Basics

Avoid Stereotypes

Items should avoid portraying anyone in a stereotypical manner, including his or her activities, occupations, or emotions. Remember that even positive stereotypes are still stereotypes.

Last modified: Friday, March 3, 2017, 8:42 AM

Previous: Common Language   Next: Avoid Offensive Content

TD101A: Test Development Basics

Avoid Offensive Content

Items must not contain any stereotypical, derogatory, or proselytizing references. However, items should maintain historical, scientific, or literary integrity.

Last modified: Friday, February 24, 2017, 12:44 PM

Previous: Avoid Stereotypes   Next: Socioeconomic/Family Sensitivity

TD101A: Test Development Basics

Socioeconomic/Family Sensitivity

Items should not assume that all students come from the same socioeconomic or family background.

Last modified: Tuesday, December 6, 2016, 9:39 AM

Previous: Avoid Offensive Content   Next: Artwork

TD101A: Test Development Basics

Artwork

Artwork should be used only when needed to respond to the item and should conform to the bias/sensitivity guidelines previously discussed. Artwork should adequately reflect the diversity of the student population.

Last modified: Friday, March 3, 2017, 8:29 AM

Previous: Socioeconomic/Family Sensitivity   Next: Security and Copyrights

TD101A: Test Development Basics

Security and Copyrights

The North Carolina Testing Program consists of high-stakes assessments used to report student achievement at the school, district, state, and federal levels. Security must be maintained at all times, from the initial stages of test development (item writing) to the final delivery of the assessment (test administration). Compromised security of a single item on a test form invalidates the entire form, resulting in a significant financial loss for the state of North Carolina.

All items written and submitted for use in the North Carolina Testing Program are secure property of the state of North Carolina, regardless of whether the item is actually used on an assessment. Contracted item writers and reviewers for the North Carolina Testing Program must thoroughly understand and sign the *Test Security Agreement*, which affirms compliance with the North Carolina *Testing Code of Ethics* (16 NCAC 6D .0306).

There will be a brief quiz at the completion of this topic.

Last modified: Tuesday, June 23, 2020, 9:09 AM

Previous: Artwork   Next: About the Testing Code of Ethics

TD101A: Test Development Basics

About the Testing Code of Ethics

The North Carolina *Testing Code of Ethics* (16 NCAC 6D .0306) is a codified security policy relating to the North Carolina Testing Program. Items written and submitted to the North Carolina Testing Program are subject to all aspects of the *Testing Code of Ethics* and must not be shared with anyone for any reason. The items are the sole property of the North Carolina Testing Program and thus security violations are considered violations of the *Testing Code of Ethics*. All contracted item writers and reviewers must sign the *Test Security Agreement* form before beginning contractual services.

Last modified: Tuesday, June 23, 2020, 9:11 AM

Previous: Security and Copyrights   Next: North Carolina Testing Code of Ethics

TD101A: Test Development Basics

North Carolina Testing Code of Ethics

$WPM2FB9   1 / 4   — 89% +   ⊡ ◈
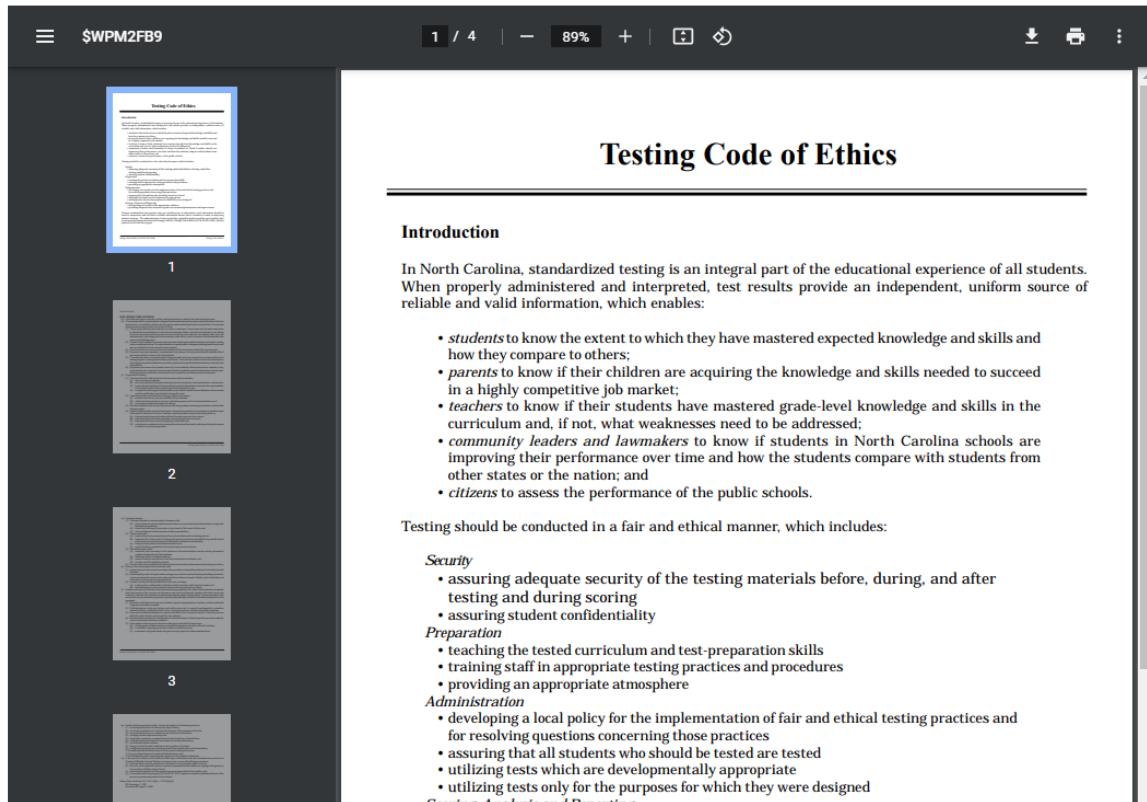
Testing Code of Ethics

Introduction

In North Carolina, standardized testing is an integral part of the educational experience of all students. When properly administered and interpreted, test results provide an independent, uniform source of reliable and valid information, which enables:

- *students* to know the extent to which they have mastered expected knowledge and skills and how they compare to others;
- *parents* to know if their children are acquiring the knowledge and skills needed to succeed in a highly competitive job market;
- *teachers* to know if their students have mastered grade-level knowledge and skills in the curriculum and, if not, what weaknesses need to be addressed;
- *community leaders and lawmakers* to know if students in North Carolina schools are improving their performance over time and how the students compare with students from other states or the nation; and
- *citizens* to assess the performance of the public schools.

Testing should be conducted in a fair and ethical manner, which includes:

Security
- assuring adequate security of the testing materials before, during, and after testing and during scoring
- assuring student confidentiality

Preparation
- teaching the tested curriculum and test-preparation skills
- training staff in appropriate testing practices and procedures
- providing an appropriate atmosphere

Administration
- developing a local policy for the implementation of fair and ethical testing practices and for resolving questions concerning those practices
- assuring that all students who should be tested are tested
- utilizing tests which are developmentally appropriate
- utilizing tests only for the purposes for which they were designed

Scoring, Analysis and Reporting

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Test Security Agreement

PUBLIC SCHOOLS OF NORTH CAROLINA
DEPARTMENT OF PUBLIC INSTRUCTION | Mark Johnson, *Superintendent of Public Instruction*
WWW.NCPUBLICSCHOOLS.ORG

TEST SECURITY AGREEMENT
2018 – 2019

North Carolina State Department of Public Instruction
Division of Accountability – Test Development Section

All North Carolina test materials are the property of the North Carolina Department of Public Instruction (NCDPI). North Carolina test materials must remain secure at all times.

In order to insure test security, I understand that I am not to discuss/share information relating to the test, the testing process, or test scoring. This restriction applies to discussion with the media, including, but not limited to, print and television media. I agree to refer any and all questions from the media to the appropriate NCDPI project coordinator.

I agree not to publish any educational testing or scoring material or share this material outside of the secure work site. Any knowledge or experience gained during this process is not to be discussed, shared, or likewise published in any form during or after the completion of the project. I realize that testing and scoring materials are secure and must not be taken from the work site or photocopied at anytime unless the removal is specifically approved by the Department of Public Instruction leadership.

I agree that I will not generate/produce products (test selections, compositions, prompts, items, tasks, reviews, etc.) while I am on duty at my regular employer/employee duty station.

In the event of a violation of this agreement I understand that the State of North Carolina, in accordance with the contested case provisions of Chapter 150B of the General Statutes, may impose any one or more of the following sanctions:

1)   file a civil action against the person or persons responsible for the violation
2)   seek criminal prosecution of the person or persons responsible for the violation
3)   in accordance with the provisions of 16 NCAC 6C .0312, suspend or revoke the professional license of the person or persons responsible for the violation.

By signing below, I am acknowledging that I have read and understand the consequences of violating the security of North Carolina tests

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TD101A: Test Development Basics

Ownership of Items Authored

Items authored and submitted to fulfill a contractual agreement in support of the North Carolina Testing Program are required to be original works and become secure test materials and the property of the North Carolina Department of Public Instruction.

Once an item writer has submitted an item, that item or even a close facsimile of that item cannot be used for instruction or for any other purpose.

In order to ensure the integrity and legality of the educational test product (reading selections, new items, prompts, tasks, item reviews, etc.) submitted for use in the North Carolina Testing Program, item writers must guarantee that they are the creator of all test materials they submit.

Item writers must agree that they understand that submitting test materials that have been published previously is a violation of copyright law. Item writers guarantee that they will not submit a test product to the North Carolina Testing Program from any outside source, including classroom materials, textbooks, or other curriculum materials.

In addition, item writers must acknowledge and agree that the submitted test product (and all rights therein, including, without limitation, copyright) belongs to and shall be the sole and exclusive property of the North Carolina Department of Public Instruction and is considered to be secure test material. As such, it may not be used for classroom instruction or assessment purposes except as directed by the North Carolina Testing Program.

Item writers must agree not to publish any testing or scoring product or share this product. Any knowledge or experience gained during this process for which the writer has been hired is not to be discussed, shared, or likewise published in any form.

If you are hired as an item writer, you will be required to read and sign an Original Work and Test Security Agreement form. When you have finished reviewing the Original Work and Test Security Agreement form, move to the next course resource (click next).

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TD101A: Test Development Basics

Avoid Trademarks

A trademark includes any word, name, symbol, device, or any combination thereof used, or intended to be used, in commerce to identify and distinguish the goods of one manufacturer or seller from goods manufactured or sold by others and to indicate the source of the goods. In short, a trademark is a brand name.

Because trademarks are brand names, avoid using them in any test items you write.

For example, use:

"tissue" instead of "Kleenex®"

"soda" instead of "Coca-Cola®"

"hamburger" instead of "Big Mac®"

"truck" instead of "Ford F-150®"

Last modified: Monday, April 1, 2019, 9:01 AM

TD101A: Test Development Basics

Work Site Security Issues

Item writers must take special care when using computing systems to author items. The use of computers to draft items is encouraged as long as security can be maintained. Drafting items before submitting their final versions using the online Test Development System (TDS) is preferred and sometimes is required. If using a computer to create draft versions of items, the source files that contain the drafts and final work must be kept secure.

When drafting items, either on a computer or on a pad of paper, consider who is able to observe the work. A spouse, friend, child, or coworker must not be able to observe the work or access the drafts on a shared computer. Only the writer should have access to these secure files.

It is best to store these files in a removable storage device such as a disk or flash/USB drive. This allows one to draft items on a computer and store notes about the work, while saving the information where others cannot access it.

Any notes or items stored either on paper or electronically *MUST* be shredded or deleted upon completion of a contract.

If it is suspected that items that the item writers have authored or reviewed may have been compromised by unauthorized access, they *MUST IMMEDIATELY* contact the Help Desk (ncdesk@ncsu.edu or 919-515-1320 and provide details of the potential security breach.

Last modified: Friday, March 3, 2017, 8:34 AM

TD101A: Test Development Basics

Security and Copyrights Quiz

For review purposes, this quiz covers content presented in this topic. Trainees have unlimited attempts to complete this quiz. Once successfully completed a link will allow the trainee to move to the next course topic.

Grading method: Highest grade

TD101A: Test Development Basics

Question 1

Not yet answered

Points out of 1.00

⚑ Flag question

Which *best* describes items written and submitted to the North Carolina state testing program?

Select one:

- ○ a. specially ordered or commissioned work
- ○ b. original work that is property of the North Carolina Department of Public Instruction
- ○ c. original work created for educational purposes
- ○ d. original work in joint ownership between the author and the North Carolina Department of Public Instruction

Previous: Work Site Security Issues

Next: Accessing the TD101B Series Courses

Next page

TD101A: Test Development Basics

Question 2

Not yet answered

Points out of 1.00

⚑ Flag question

What *must* be done to notes and drafts when an item writer has completed an assignment?

Select one:

- ○ a. keep them in a secure location
- ○ b. shred or delete all files
- ○ c. mail them to the content contact
- ○ d. make copies for instruction

Previous page

Next page

Previous: Work Site Security Issues

Next: Accessing the TD101B Series Courses

TD101A: Test Development Basics

Question 3

Not yet answered

Points out of 1.00

⚑ Flag question

Items authored and submitted are considered secure test materials.

Select one:

- ○ True
- ○ False

Previous page

Next page

Previous: Work Site Security Issues

Next: Accessing the TD101B Series Courses

TD101A: Test Development Basics

Question 4

Not yet answered

Points out of 1.00

⚑ Flag question

Under what circumstances is using a computer to draft items acceptable?

Select one:

○ a. when the computer used is located at a school or place of work

○ b. when a computer is in a public place

○ c. when users have a shared account

○ d. when files can be kept secure and work cannot be accessed or observed by others

[Previous page]   [Next page]

TD101A: Test Development Basics

Question 5

Not yet answered

Points out of 1.00

⚑ Flag question

Item writers should make and keep copies of items written after completion of the contract.

Select one:

○ True

○ False

[Previous page]   [Finish attempt ...]

TD101B2: Webb's Depth of Knowledge (DOK)

Introduction

This course is designed for anyone interested in learning how to write and review assessment items for the North Carolina Testing Program based on the North Carolina *Standard Course of Study* and North Carolina Essential Standards.

In order to provide more rigor and increase the higher-order thinking skills required for student success, the North Carolina Department of Public Instruction adopted frameworks for identifying cognitive demand.

The North Carolina Testing Program requires items written to be tagged with the appropriate cognitive load designation that has been modeled to each standard. Because of different thinking skill taxonomies that were desired by the department at the time standards were revised, some standards have learning resources and test items tagged to Webb's Depth of Knowledge (DOK), others are tagged to Revised Bloom's Taxonomy (RBT); while even others are tagged to Marzano's Thinking Skills (TS). Whichever case is required for the standard, item writers and reviewers need to have a basic understanding of the taxonomies that are covered for the standards that they are writing to or reviewing.

This self-directed course should take approximately thirty (30) minutes to complete. Upon successful completion, enrollment keys for the associated subjects/standards are provided.

Webb's Depth-of-Knowledge (DOK)

- Introduction to Webb's Depth of Knowledge
- Webb's Depth of Knowledge (DOK) Levels Chart
- Level 1 - Recall and Reproduction
- Level 1 - Recall and Reproduction - Example Items
- Level 2 - Skills and Concepts
- Level 2 - Skills and Concepts - Example Items
- Level 3 - Strategic Thinking
- Level 3 - Strategic Thinking - Example Items
- Level 4 - Extended Thinking
- Level 4 - Extended Thinking - Example Items
- Quiz

Next Steps

- Next Steps

TD101B2: Webb's Depth of Knowledge (DOK)

Webb's Depth of Knowledge

This section of the tutorial provides an overview of Webb's Depth of Knowledge (DOK). According to Webb's alignment model, the test questions developed need to agree with the standards in terms of content and DOK. Each item has been classified into one of three DOK levels; item writers are tasked with writing test questions that match each standard in content and to a DOK level. The document posted in this section of the tutorial will provide definitions and examples of each DOK level.

Read the overview of Webb's DOK alignment model, study the example items provided, and take the quiz to check for understanding.

Last modified: Monday, July 13, 2020, 10:04 AM

| Previous: Announcements | Next: Webb's Depth of Knowledge (DOK) Levels Chart |

TD101B2: Webb's Depth of Knowledge (DOK)

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101B2 ▸ Webb's Depth-of-Knowledge (DOK) ▸ Webb's Depth of Knowledge (DOK) Levels Chart

Webb's Depth of Knowledge (DOK) Levels Chart
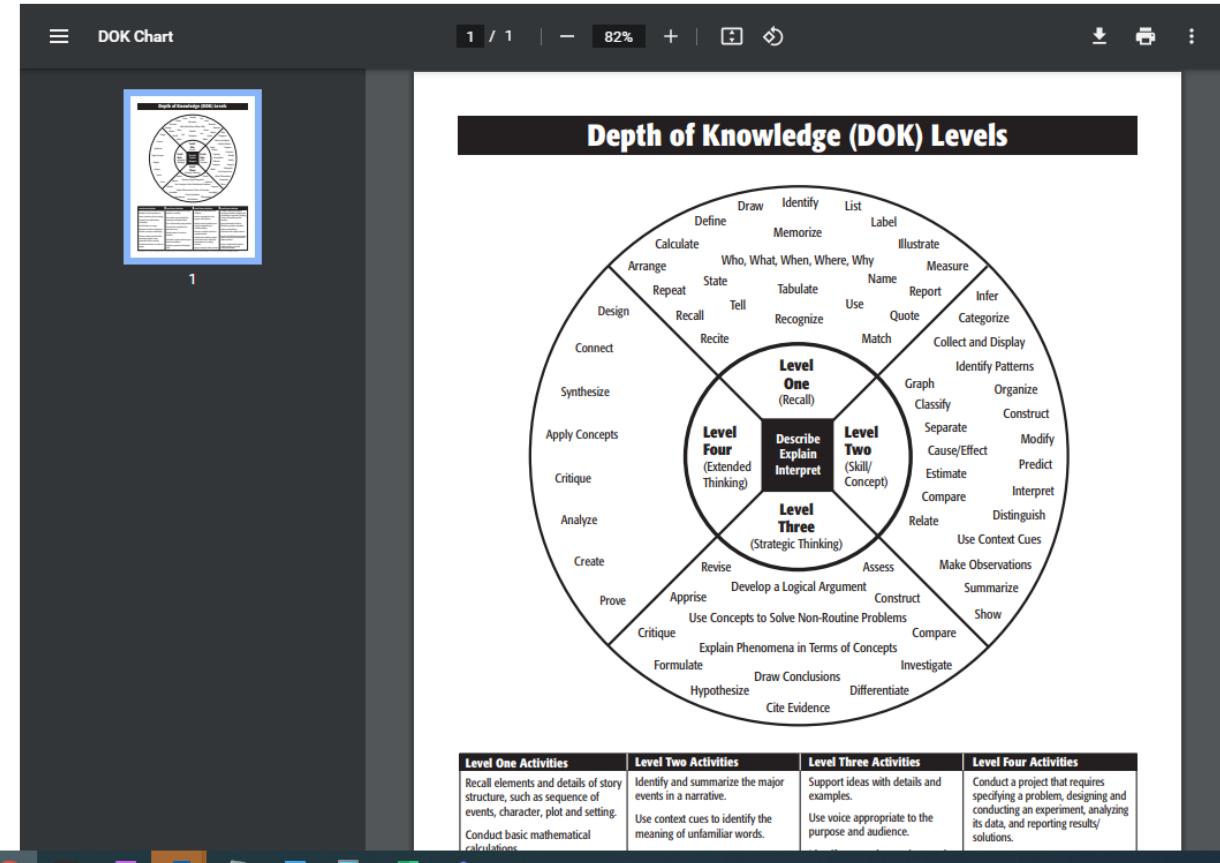
TD101B2: Webb's Depth of Knowledge (DOK)

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101B2 ▸ Webb's Depth-of-Knowledge (DOK) ▸ Level 1 - Recall and Reproduction

Level 1 - Recall and Reproduction

Level 1 - Recall and Reproduction:

- includes the recall of information, such as a fact, definition, term, or a simple procedure
- recounts information specifically stated in a text
- conducts basic mathematical calculations, such as a one-step, well-defined, and straight algorithmic procedure
- includes key words such as "identify," "recall," "recognize," "use," and "measure."
- demonstrates a rote response, performs a well-known algorithm, follows a set procedure, or performs a clearly defined set of steps

Note: Reading assessments only include Level 1 items in elementary grade levels.

Last modified: Monday, July 13, 2020, 10:08 AM

TD101B2: Webb's Depth of Knowledge (DOK)

Home ▶ Courses ▶ Accountability ▶ Test Development ▶ TD101B2 ▶ Webb's Depth-of-Knowledge (DOK) ▶ Level 1 - Recall and Reproduction - Example Items

Level 1 - Recall and Reproduction - Example Items

Level 1 Item Example for Math

From any vertex of a 4-sided polygon, 1 diagonal can be drawn.

From any vertex of a 5-sided polygon, 2 diagonals can be drawn.

From any vertex of a 6-sided polygon, 3 diagonals can be drawn.

From any vertex of a 7-sided polygon, 4 diagonals can be drawn.

How many diagonals can be drawn from any vertex of a 20-sided polygon?

Explanation: The first thing to note is that this is not really a geometry item. Rather, it simply requires students to notice an easy, routine pattern. DOK levels are difficult to assign for many pattern-recognition problems, because they depend on how routine the pattern is. This particular pattern is immediately recognizable and requires no processing, but a more complex pattern could make this item Level 2 or even Level 3.

Level 1 Item Example for ELA

When Lisa and Henry walked into the cave, they were surprised to see how bright it was. Light from a large crack in the ceiling made the water flowing through the trough in the floor shine. Lisa reached down to touch it, but Henry stopped her...

Why was Lisa able to see the water in the cave?

Explanation: Despite not being a word-for-word item, the answer is found directly in the text. There is no interpretation required to answer the item.

Last modified: Monday, February 27, 2017, 3:17 PM

TD101B2: Webb's Depth of Knowledge (DOK)

Home ▶ Courses ▶ Accountability ▶ Test Development ▶ TD101B2 ▶ Webb's Depth-of-Knowledge (DOK) ▶ Level 2 - Skills and Concepts

Level 2 - Skills and Concepts

Level 2 Skills and Concepts:

- includes the engagement of some mental processing beyond a habitual response
- requires students to contrast or compare people, places, events and concepts; analyze meaning of events in a text
- describe or explain issues and problems, patterns, cause and effect, significance or impact, relationships, points of view or processes
- requires students to make some decisions as to how to approach the problem
- includes words such as "classify," "organize," "estimate," "make observations," "collect and display data," and "compare data" (These actions imply more than one step. For example, to compare data requires first identifying characteristics of objects or phenomena and then grouping or ordering the objects.)
- includes some action verbs, such as "explain," "describe," or "interpret (For example, interpreting information from a simple graph, or reading information from the graph, also are at Level 2.)
- includes activities such as noticing or describing nontrivial patterns; explaining the purpose and use of experimental procedures; carrying out experimental procedures; making observations and collecting data; classifying, organizing, and comparing data; and organizing and displaying data in tables, graphs, and charts

Last modified: Monday, July 13, 2020, 10:16 AM

Level 2 - Skills and Concepts - Example Items

Level 2 Item Example for Math

A triangle has 0 diagonals, a quadrilateral has 2 diagonals, a pentagon has 5 diagonals, and a hexagon has 9 diagonals. If the pattern continues, how many diagonals will an octagon have?

A 11

B 14

C 18

D 20

Explanation: Pattern recognition is required to solve this item, but the nonroutine nature of this pattern brings this up to a higher DOK level. Some analysis and generalization is required in order to understand and extend this pattern.

Level 2 Item Example for ELA

There are three main points of focus when learning to take a beautiful photograph. These are aperture, shutter speed, and ISO. No one aspect is more important than the others, but photographers will often make one a priority, depending on the subject of the photo. For example, in sports, shutter speed is of special interest to photographers...

Why is it important for photographers to understand all three elements of photography before taking pictures?

Explanation: This item requires the student to take the information from the text and apply it to the item.

Last modified: Friday, March 3, 2017, 1:40 PM

Level 3 - Strategic Thinking

Level 3 Strategic Thinking:

- requires reasoning, planning, using evidence, and a higher level of thinking than the previous two levels
- requires students to explain their thinking
- requires students to make conjectures
- requires cognitive demands to be complex and abstract
- requires more demanding reasoning
- includes drawing conclusions from observations; citing evidence and developing a logical argument for concepts; explaining phenomena in terms of concepts; and deciding which concepts to apply in order to solve a complex problem
- includes interpreting information from a complex graph that requires some decisions on what features of the graph need to be considered and how information from the graph can be aggregated

Last modified: Friday, March 3, 2017, 1:41 PM

TD101B2: Webb's Depth of Knowledge (DOK)

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101B2 ▸ Webb's Depth-of-Knowledge (DOK) ▸ Level 3 - Strategic Thinking - Example Items

Level 3 - Strategic Thinking - Example Items

Level 3 Item Example for Math

$S = w/x + y/z$.

If $0 < w < x < y < z$ in the equation above, then the greatest increase in S would result from adding 1 to the value of which variable?

A w

B x

C y

D z

Explanation: If a multiple-choice item is Level 3, often it is because the multiple choices do not constrain or guide the possible solutions. The choices here allow for all possible responses to this item.

Level 3 Item Example for ELA

There is much controversy surrounding the topic of indoor/outdoor cats. Allowing cats to run loose poses a grave risk to the songbird population. That being said, a strong feline presence in one's yard can keep a garage (and the house!) free from mice. However, while there are valuable points on both sides, one indisputable fact remains: even the strongest, fiercest cat is no match for passing cars, big dogs, and other dangers.

Which quote from the text supports the author's claim that pet cats should be kept indoors?

Explanation: In this item, the student needs to decide which parts of the text are appropriate to the item. This is especially important when there is information from both sides of a topic.

Last modified: Friday, March 3, 2017, 1:41 PM

Previous: Level 3 - Strategic Thinking

Next: Level 4 - Extended Thinking

TD101B2: Webb's Depth of Knowledge (DOK)

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101B2 ▸ Webb's Depth-of-Knowledge (DOK) ▸ Level 4 - Extended Thinking

Level 4 - Extended Thinking

Level 4 Extended Thinking:

- requires complex reasoning, planning, developing, and thinking, most likely over an extended period of time
- requires taking into consideration a number of variables when doing a study
- requires the cognitive demands of the task to be high and the work very complex
- requires students to make several connections—relate ideas within the content area or among content areas—and to select one approach among many alternatives on how the situation should be solved
- includes activities such as designing and conducting experiments and projects; developing and proving conjectures; making connections between a finding and related concepts and phenomena; combining and synthesizing ideas into new concepts; and critiquing experimental designs

Level 4 Extended Thinking cannot be reached in traditional standardized testing. This level requires long term assignments/projects that are great for classroom use. A feedback and revision process is a key component of Level 4. As a result, Level 4 Extended Thinking items do not appear on North Carolina EOG or EOC assessments.

Last modified: Monday, July 13, 2020, 10:20 AM

Previous: Level 3 - Strategic Thinking - Example Items

Next: Level 4 - Extended Thinking - Example Items

TD101B2: Webb's Depth of Knowledge (DOK)

Level 4 - Extended Thinking - Example Items

Level 4 Item Example for Math

Sam, Tetsuo, and Kim each own some baseball cards that Ted is willing to trade them for. Here is what they are worth:

Sam's Cards: Boone - $0.80, Galarraga - $0.40, McGee - $1.50

Tetsuo's Cards: Smith - $1.30, Jones - $1.00

Kim's Cards: Johnson - $0.70, Carter - $2.20

Ted will trade his Wilson card for $6.75 worth of cards. What is the best trade that Sam, Tetsuo, and Kim can make for Ted's Wilson card?

What trade could Sam, Tetsuo, and Kim offer Ted that would be the most fair between Sam, Tetsuo, and Kim? Explain your thinking and show all your work.

Explanation: This is a complex, open-ended problem requiring students "to make several connections and apply one approach among many." It requires the students to plan and organize, and to weigh solutions based on different kinds of criteria. Students should be allowed an extended period of time to complete this item.

Level 4 Item Example for ELA

A term paper that requires students to complete the tasks of reviewing, critiquing, and rewriting.

Last modified: Monday, July 13, 2020, 10:22 AM

TD101B2: Webb's Depth of Knowledge (DOK)

Quiz

This quiz will assess understanding of Depth of Knowledge (DOK) levels. In order to be an item writer or reviewer a minimum score of 80% is required and an unlimited number of attempts to achieve the minimum score.

Click **ONLY** the Previous Page and Next Page buttons while in the quiz. **DO NOT** click the Previous or Next links at the bottom of the page until having successfully completed the quiz.

Grading method: Highest grade

TD101B2: Webb's Depth of Knowledge (DOK)

Question **1**	What depth-of-knowledge (DOK) level requires the simple recall of information such as a fact, definition, term, or simple procedure?
Not yet answered	
Points out of 1.00	Select one:
⚑ Flag question	○ a. DOK 1
	○ b. DOK 2
	○ c. DOK 3
	○ d. DOK 4

       Next page

TD101B2: Webb's Depth of Knowledge (DOK)

Question 2

Answer saved

Points out of 1.00

⚑ Flag question

- What depth-of-knowledge (DOK) level includes recounting explicit information or performing a well-known algorithm?

Select one:
- ● a. DOK 1
- ○ b. DOK 2
- ○ c. DOK 3
- ○ d. DOK 4

TD101B2: Webb's Depth of Knowledge (DOK)

Question 3

Not yet answered

Points out of 1.00

⚑ Flag question

What depth-of-knowledge (DOK) level cannot be reached using multiple choice items?

Select one:
- ○ a. DOK 1
- ○ b. DOK 2
- ○ c. DOK 3
- ○ d. DOK 4

TD101B2: Webb's Depth of Knowledge (DOK)

Question 4

Not yet answered

Points out of 1.00

⚑ Flag question

What depth-of-knowledge (DOK) level requires students to analyze a text or make some decisions as to how to approach a problem or activity?

Select one:

- ○ a. DOK 1
- ○ b. DOK 2
- ○ c. DOK 3
- ○ d. DOK 4

Previous page   Next page

TD101B2: Webb's Depth of Knowledge (DOK)

Question 5

Not yet answered

Points out of 1.00

⚑ Flag question

What depth-of-knowledge (DOK) level requires students to support information given in a text or take more than one step to solve a problem, such as when they are asked to compare data?

Select one:

- ○ a. DOK 1
- ○ b. DOK 2
- ○ c. DOK 3
- ○ d. DOK 4

Previous page   Next page

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TD101B2: Webb's Depth of Knowledge (DOK)

Question 6
Not yet answered
Points out of 1.00
⚑ Flag question

What depth-of-knowledge (DOK) level requires students to make conjectures about validity of claims or use higher level thinking to solve non-routine problems?

Select one:
- ○ a. DOK 1
- ○ b. DOK 2
- ○ c. DOK 3
- ○ d. DOK 4

Previous page   Next page

TD101B2: Webb's Depth of Knowledge (DOK)

Question 7
Not yet answered
Points out of 1.00
⚑ Flag question

What depth-of-knowledge (DOK) level requires students to analyze the effect of point of view or reason, plan, and use evidence when problem solving?

Select one:
- ○ a. DOK 1
- ○ b. DOK 2
- ○ c. DOK 3
- ○ d. DOK 4

Previous page   Finish attempt ...

TD101B2: Webb's Depth of Knowledge (DOK)

Quiz

This quiz will assess understanding of Depth of Knowledge (DOK) levels. In order to be an item writer or reviewer a minimum score of 80% is required and an unlimited number of attempts to achieve the minimum score.

Click **ONLY** the Previous Page and Next Page buttons while in the quiz. **DO NOT** click the Previous or Next links at the bottom of the page until having successfully completed the quiz.

Grading method: Highest grade

TD101B2: Webb's Depth of Knowledge (DOK)

Next Steps

Continue training by selecting the course that relates to concepts found in the DOK:

TD101C1_ELA: English Language Arts Standards Grade 3-8

TD101C2 ELA: English Language Arts Standards High School

TD101C1_MAT: NC Math Standards Grades 3-8

TD101C2 MAT: NC Math Standards High School

Use the enrollment key "webb" to self-enroll in the course.

Last modified: Monday, July 13, 2020, 10:56 AM

Previous: Quiz   Next:

TD101E: Plain English Strategies

Your progress ⓘ

Plain English Overview

- Language and Assessment ☑
- What is Plain English in Assessment? ☑
- Accessibility in Assessment ☑
- Why Use Plain English in Assessment? ☑

Plain English Research and Application

- Plain English Strategies ☑
- Synonyms and Pronouns ☑
- Negation and Long Noun Phrases ☑
- Verb Tense and Passive Voice ☑
- Sentence Length ☑
- Complex Sentence Structure ☑
  - Construct and Complexity ☑

Sample Items

- Sample Item 1 ☑
- Sample Item 2 ☑
- Sample Item 3 ☑
- Sample Item 4 ☑
- Sample Item 5 ☑
- Sample Item 6 ☑

Plain English Quiz

- Pre Quiz Warning ☑
- Plain English Quiz ☑

Next Steps

- Certificate of Completion ☑

TD101E: Plain English Strategies

Language and Assessment

- Language is an essential part of any assessment.
- While rich language can make assessment more interesting for some students, it can also cause confusion and misunderstanding for others.
- Jamal Abedi, a leading researcher in the assessment of English Learner (EL) students, points out ". . .it is of paramount importance to distinguish between language that is a natural part of an assessment and the language that is unrelated to the assessment process" (Elliot, Ryan, Beddow & Kurtz, 2011, p. 219).

Last modified: Monday, August 24, 2020, 10:58 AM

Previous: Next: What is Plain English in Assessment?

TD101E: Plain English Strategies

What is Plain English in Assessment?

- Plain English is a viable, research-supported process for helping to reduce the complexity of language on an assessment in order to improve clarity without altering the constructs targeted for measurement.
- Plain English improves accessibility for EL students and non-EL students who are not proficient in English Language Arts.

Last modified: Monday, August 24, 2020, 10:56 AM

Previous: Language and Assessment   Next: Accessibility in Assessment

TD101E: Plain English Strategies

Accessibility in Assessment

- Accessibility refers to ". . . the degree to which a test and its constituent item set permit the test taker to demonstrate knowledge of the target construct of a test" (Beddow et al., 2010, p. 2).
- Unnecessary and complex language may affect the overall accessibility of an assessment.

Last modified: Thursday, September 3, 2020, 8:16 AM

Previous: What is Plain English in Assessment?   Next: Why Use Plain English in Assessment?

TD101E: Plain English Strategies

Why Use Plain English in Assessment?

- Assessments should provide valid and reliable information about what students know and can do.
- Research on the assessment of EL students clearly and consistently shows a large performance gap between EL and non-EL students in all content areas.
- There is no evidence to suggest that EL students have less ability to learn than non-EL students.
- Legislation requires fair assessment and accountability for all students.
- Section 1005 of the Every Student Succeeds Act (ESSA) of 2015 instructs states to implement high-quality assessments that shall "be developed, to the extent practicable, using the principles of universal design for learning."
- In other words, North Carolina's assessments should be designed so that its students can access and understand them to the greatest extent possible.
- Variables such as linguistic and cultural biases may be responsible for performance gaps.

Last modified: Wednesday, July 7, 2021, 11:20 AM

Previous: Accessibility in Assessment   Next: Plain English Strategies

TD101E: Plain English Strategies

Plain English Strategies

- The following slides list the linguistic features on assessments that research has shown to have an effect on the performance of EL students along with Plain English strategies for addressing them.

- These strategies are **NOT** strict rules. It is always important to first consider whether the language used in an item is relevant to the construct being measured.

Linguistic Feature	Plain English Strategies	Examples
Unfamiliar words	Use simple, high-frequency words. Exception: vocabulary directly related to the content students are expected to know Use generic terms and contexts familiar to diverse backgrounds.	Ex. Use the word dog instead of canine. Ex. Use the word tree instead of oak. Ex. Use "grocery store" instead of "Food Lion"
Words/phrases that do not have a clear translation	Avoid verbs that consist of two words and idioms. Avoid words with multiple meanings.	Ex. Use the word cancel instead of call off. Ex. Use the phrase "It's too late" instead of "You missed the boat."

Last modified: Thursday, September 3, 2020, 8:43 AM

TD101E: Plain English Strategies

Synonyms and Pronouns

Linguistic Feature	Plain English Strategy	Examples
Overuse of Synonyms	Use the same word to describe a single concept or thing in an item.	Ex. Synonyms like table, chart, and matrix should not be used to describe the same thing in an item.
Overuse of Pronouns	Use pronouns when the noun they are used to replace is in close proximity.	Ex. "Maria had 10 marbles in a bag. It weighed 1 pound. Then she added some more until it weighed two pounds." vs. "Maria had 10 marbles in a bag. The bag weighed 1 pound. Then, she added more marbles until the bag weighed 2 pounds."

Last modified: Wednesday, July 7, 2021, 11:20 AM

TD101E: Plain English Strategies

Linguistic Feature	Plain English Strategy	Examples
Negation Sentences containing negations (e.g., no, not, none, never) are harder to comprehend than affirmative sentences.	Use affirmative statements when appropriate.	Ex. "Jane is gone." vs. "Jane is not here."
Long Noun Phrases	Only include adjectives that are essential to an item.	Ex. "A loaded tractor-trailer truck weighs..." vs. "A loaded truck weighs . . . "

Last modified: Wednesday, July 7, 2021, 11:21 AM

Previous: Synonyms and Pronouns

Next: Verb Tense and Passive Voice

TD101E: Plain English Strategies

Verb Tense and Passive Voice

Linguistic Feature	Plain English Strategy	Examples
Verb Tense	Use simple present tense when appropriate. The present tense is easiest to understand.	Ex."Aaron goes to the store." vs. "Aaron is going to the store."
Passive Voice The Passive voice occurs when the subject of a sentence is the recipient of the verb's action.	Use the active voice. The active occurs when a sentence has a subject that acts on its verb. It is easier for readers to understand.	Ex. "The dog chased the squirrel." vs. "The squirrel was chased by the dog."

Last modified: Wednesday, July 7, 2021, 11:21 AM

Previous: Negation and Long Noun Phrases

Next: Sentence Length

TD101E: Plain English Strategies

Sentence Length

Linguistic Feature	Plain English Strategies	Examples
Sentence Length Longer sentences tend to be complex and harder to understand.	Break long sentences into shorter ones. Remove unnecessary detail. Use bullets to list an item's details. This is especially helpful in math and science.	Ex. "There are 136 students in a school cafeteria. There are 8 students sitting at each table." vs. "There are 136 students eating lunch in an elementary school cafeteria with 8 students sitting at each table."

Last modified: Wednesday, July 7, 2021, 11:22 AM

Previous: Verb Tense and Passive Voice

Next: Complex Sentence Structure

Complex Sentence Structure

Linguistic Feature	Plain English Strategies	Examples/Recommendations
Complex sentence structure Complex sentences tend to be more difficult to understand than simple and compound sentences.	Use a subject-verb-object sentence structure for statements. Begin questions with a question word. Use present tense and the active voice. Avoid starting a question with a dependent clause. Avoid "if" statements. Use multiple short sentences vs. one long sentence.	Ex. "Evan delivers the newspaper to 100 people a day. How many people does Evan deliver the newspaper to in 5 days?" vs. "If Evan delivers the newspaper to 100 people a day, how many people does Evan deliver to in 5 days?" Ex. "What does 'hold your horses' mean in paragraph 4?" vs. "In the selection, what is meant by the phrase "hold your horses"?

Last modified: Thursday, September 3, 2020, 9:01 AM

Construct and Complexity

- Questions to consider when applying Plain English strategies:
    - What are the skills and content targeted for measurement?
    - What is the level of cognitive complexity that needs to be assessed

* An item's targeted construct and its cognitive complexity should not be altered. Plain English strategies are designed to simplify the wording of an item without altering the construct and complexity required in the standards.

Last modified: Thursday, September 3, 2020, 9:07 AM

TD101E: Plain English Strategies

Sample Item 1

Sample Item - Math, Grade 3

ORIGINAL VERSION Sam walks 4 miles a day. His goal is to walk 36 miles. After 6 days, how many miles does Sam have left to accomplish his goal? Which equation below represents this problem? A) $3 \times 5 + n = 36$ B) $4 \times 6 + n = 36$ C) $4 \times 6 \times n = 36$ D) $9 \times 4 + n = 36$	Standard 3.OA.8: Solve two-step problems using addition, subtraction, and multiplication, representing problems using equations with a symbol for the unknown number. Cognitive Complexity: Skill/Concept (DOK)

Accessibility Issues:

- The third sentence has a complex structure: "After 6 days, how many miles does Sam have left to accomplish his goal?"

- The third sentence also uses a word that could be unfamiliar to some students: "accomplish."

- The item asks two questions.

IMPROVED VERSION Sam's goal is to walk 36 miles. - He walks 4 miles each day. - He has walked for 6 days. Which equation can be used to find how many more miles Sam needs to walk to reach his goal? A) $3 \times 5 + n = 36$ B) $4 \times 6 + n = 36$ C) $4 \times 6 \times n = 36$ D) $9 \times 4 + n = 36$	Standard 3.OA.8: Solve two-step problems using addition, subtraction, and multiplication, representing problems using equations with a symbol for the unknown number. Cognitive Complexity: Skill/Concept (DOK)

Plain English Strategies:

- "Accomplish" is replaced with an easier word ("reach").

- Bullets are used to list an item's details.

- Item uses multiple short sentences.

- Sentences follow a subject-verb-object structure.

*Note: Alignment to the standard and cognitive complexity did not change.
Last modified: Friday, September 11, 2020, 10:59 AM

TD101E: Plain English Strategies

Sample Item 2

Sample Item - Math, Grade 3

ORIGINAL VERSION	
Logan is setting up a produce stand. Each basket can hold a maximum of 6 plums. If he has 348 plums, what is the fewest number plum baskets Logan can prepare and still use all the plums? A) 56 B) 57 C) 58 D) 59	Standard 4.NBT.6: Find whole number quotients and remainders with up to three-digit dividends and one-digit divisors with place-value understanding using rectangular arrays, area models, repeated subtraction, partial quotients, properties of operations, and/or the relationship between multiplication and division. Cognitive Complexity: Recall

Accessibility Issues:

- The first sentence has a verb consisting of two words: "setting up."
- Item contains words with multiple meanings: "stand" and "produce."
- "Maximum" might be an unfamiliar word (grade 6).
- The question has a complex sentence structure: "If he has 348 plums..."

IMPROVED VERSION	
A farmer has 348 apples, and he wants to put them into baskets. He will put 6 apples into each basket. How many baskets will the farmer use? A) 56 B) 57 C) 58 D) 59	Standard 4.NBT.6: Find whole number quotients and remainders with up to three-digit dividends and one-digit divisors with place-value understanding using rectangular arrays, area models, repeated subtraction, partial quotients, properties of operations, and/or the relationship between multiplication and division. Cognitive Complexity: Recall (DOK)

Plain English Strategies:

- Item was edited to avoid using a verb consisting of two words, words with multiple meanings, and unfamiliar words.
- Sentences follow a subject-verb-object structure.
- The question starts with a question word.

*Note: Alignment to the standard and cognitive complexity did not change.

Last modified: Friday, September 11, 2020, 11:00 AM

TD101E: Plain English Strategies

Sample Item 3

Sample Item - Science, Grade 5

ORIGINAL VERSION	
A food chain in an ecosystem includes blueberry bushes, rabbits, and owls. • The rabbits eat the blueberry bushes. • The owls eat the rabbits. If the population of owls decreases, how will this affect the population of blueberry bushes?	Standard 5.L.2.3: Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem. Cognitive Complexity: Understanding/Conceptual (Bloom's)

Accessibility Issues:

- Item contains unnecessary detail ("blueberry") and is wordy.

- The question has a complex sentence structure: "If the population of owls decreases..."

IMPROVED VERSION	
This shows a food chain. bush → rabbit → owl The population of owls decreases in the food chain. What will most likely happen to the population of bushes?	Standard 5.L.2.3: Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem. Cognitive Complexity: Understanding/Conceptual (Bloom's)

Plain English Strategies:

- Unnecessary detail was removed ("blueberry").

- A simple diagram replaced some of the text.

- A subject-verb-object sentence structure is used.

- Previous question is broken up into two short sentences.

- Question starts with a question word.

*Note: Alignment to the standard and cognitive complexity did not change.

Last modified: Friday, September 11, 2020, 11:01 AM

Previous: Sample Item 2

Next: Sample Item 4

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TD101E: Plain English Strategies

Sample Item 4

Sample Item - Science, Grade 5

ORIGINAL VERSION	
Water droplets forming on grass during a cool summer night is an example of which part of the water cycle? A) condensation B) transpiration C) evaporation D) precipitation	Standard 5.P.2.1: Explain how the sun impacts the processes of the water cycle (including evaporation, transpiration, condensation, precipitation and runoff). Cognitive Complexity: Remember/Factual (Bloom's)

Accessibility Issues:

- The question is lengthy and does not begin with a question word.

IMPROVED VERSION	
Water droplets often form on grass at night when the temperature cools. Which part of the water cycle is this? A) condensation B) transpiration C) evaporation D) precipitation	Standard 5.P.2.1: Explain how the sun impacts the processes of the water cycle (including evaporation, transpiration, condensation, precipitation and runoff). Cognitive Complexity: Remember/Factual (Bloom's)

Plain English Strategies:

- Question is broken into two short sentences.
- Question now begins with a question word.

*Note: Alignment to the standard and cognitive complexity did not change.
Last modified: Friday, September 11, 2020, 11:03 AM

TD101E: Plain English Strategies

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Sample Item 5

Sample Item - Reading, Grade 4

ORIGINAL VERSION:	
Which statement from the text supports the idea that chefs do not have much free time? A) "It's a lot of planning." B) "Every day it's something different." C) "When everybody is playing, you're working." D) "We're going to have a wide variety of things."	Standard RI.4.1: Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. Cognitive Complexity: Skill/Concept (DOK)

Accessibility Issues:

- The question uses negation ("do not have").
- "Free time" does not have a clear translation.

IMPROVED VERSION:	
Which statement from the text supports the idea that chefs have unusual hours? A) "It's a lot of planning." B) "Every day it's something different." C) "When everybody is playing, you're working." D) "We're going to have a wide variety of things."	Standard RI.4.1: Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. Cognitive Complexity: Skill/Concept (DOK)

Plain English Strategies:

- The negation is reworded to use an affirmative phrase.
- "Free time" is reworded to use the more accessible phrase, "unusual hours."

*Note: Alignment to the standard and cognitive complexity did not change.
Last modified: Friday, September 11, 2020, 11:04 AM

Previous: Sample Item 4   Next: Sample Item 6

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TD101E: Plain English Strategies

Sample Item 6

Sample Item - Reading, Grade 4

ORIGINAL VERSION: According to the information in the text, how does the author show that being an executive chef is hard work? A. by showing the many different duties of an executive chef every day B. by describing the many recipes that an executive chef can make each season C. by explaining the different classes that an executive chef must complete D. by talking about the people who have eaten in his restaurant recently	Standard RI.4.5: Describe the overall structure of events, ideas, concepts, or information in a text or part of a text. Cognitive Complexity: DOK--Strategic Thinking

Accessibility Issues:

- The question is wordy and contains unnecessary detail ("According to the information in the text".)

IMPROVED VERSION: How does the author show that being an executive chef is hard work? A) by showing the many different duties of an executive chef every day B) by describing the many recipes that an executive chef can make each season C) by explaining the different classes that an executive chef must complete D) by talking about the people who have eaten in his restaurant recently	Standard RI.4.5: Describe the overall structure of events, ideas, concepts, or information in a text or part of a text. Cognitive Complexity: DOK--Strategic Thinking

Plain English Strategies:

- The unnecessary detail in the stem was removed.

*Note: Alignment to the standard and cognitive complexity did not change.
Last modified: Friday, September 11, 2020, 11:05 AM

Previous: Sample Item 5   Next: Pre Quiz Warning

TD101E: Plain English Strategies

Pre Quiz Warning

The quiz that follows this page (Qualification Quiz) is a graded quiz. It is recommended that trainees review any content that was covered in this course before beginning this quiz.

Trainees will now be presented with a set of 10 questions. This quiz is not timed, but it does count. Trainees may use any notes they may have made.

Trainees must pass with a minimum score of 90% and are permitted to take the quiz multiple times.

Last modified: Thursday, September 3, 2020, 2:28 PM

Previous: Sample Item 6   Next: Plain English Quiz

TD101E: Plain English Strategies

Plain English Quiz

Grading method: Highest grade

Attempt quiz now

Previous: Pre Quiz Warning   Next: Certificate of Completion

TD101E: Plain English Strategies

Question 1

Not yet answered

Points out of 1.00

⚑ Flag question

Which statement provides an accurate description of Plain English in assessment?

Select one:

○ a. Plain English is a viable process for altering the construct targeted for measurement in an assessment item.

○ b. Plain English is an evidence-based approach for ensuring students perform well on an assessment.

○ c. Plain English is a research-supported process for reducing the complexity of language on an assessment.

○ d. Plain English is a team-oriented approach for reducing the cognitive complexity of items on an assessment.

Previous: Pre Quiz Warning   Next: Certificate of Completion   Next page

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TD101E: Plain English Strategies

Question 2

Not yet answered

Points out of 1.00

⚑ Flag question

What is the purpose of designing assessments with accessibility in mind?

Select one:

○ a. to help ensure that an assessment and its item set permit a student to demonstrate his or her knowledge of constructs targeted for measurement

○ b. to help ensure students perform well on assessments and answer test items correctly

○ c. to help determine the targeted construct and cognitive complexity an item is intended to measure on an assessment

○ d. to help determine the conditions of the environment in which the assessment will be taken

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Previous: Pre Quiz Warning   Next: Certificate of Completion

TD101E: Plain English Strategies

Question 3
Not yet answered
Points out of 1.00
🏳 Flag question

What is most likely responsible for performance gaps between EL and non-EL students on assessments?

Select one:
- ○ a. unnecessary cognitive complexity
- ○ b. altered constructs targeted for measurement
- ○ c. differentiated instruction
- ○ d. linguistic and cultural biases

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Previous: Pre Quiz Warning   Next: Certificate of Completion

TD101E: Plain English Strategies

Question 4
Not yet answered
Points out of 1.00
🏳 Flag question

Which linguistic feature has research shown to improve the accessibility of a test item for EL students?

Select one:
- ○ a. verbs that consist of two words
- ○ b. the active voice
- ○ c. the use of pronouns
- ○ d. negation

[Previous page] [Next page]

Previous: Pre Quiz Warning   Next: Certificate of Completion

TD101E: Plain English Strategies

Question 5

Not yet answered

Points out of 1.00

⚑ Flag question

Which sentence uses the passive voice?

Select one:

○ a. The lesson was taught by an English teacher.

○ b. The English teacher wanted to be sure students understood the lesson.

○ c. English is not hard if you have a good teacher.

○ d. When in doubt, the English teacher told students to use a dictionary.

Previous page   Next page

Previous: Pre Quiz Warning   Next: Certificate of Completion

TD101E: Plain English Strategies

Question 6

Not yet answered

Points out of 1.00

⚑ Flag question

Which choice is a Plain English strategy for addressing complex sentence structures?

Select one:

○ a. using multiple adjectives to describe a noun

○ b. using the same word to describe a single concept or thing in an item

○ c. using generic terms and contexts familiar to diverse backgrounds

○ d. using a subject-verb-object pattern for statements

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Previous: Pre Quiz Warning   Next: Certificate of Completion

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TD101E: Plain English Strategies

Question 7

Not yet answered

Points out of 1.00

⚑ Flag question

Below are two sentences. There is a linguistic feature in the second sentence that presents an accessibility issue.

"Sally and Jane were sitting at the kitchen table. Sally wanted to talk about her day, but she seemed only interested in eating her lunch."

What is the linguistic feature in the second sentence that presents an accessibility issue?

Select one:
- ○ a. The second sentence begins with a dependent clause.
- ○ b. The second sentence contains unclear pronouns.
- ○ c. The second sentence uses the passive voice.
- ○ d. The second sentence contains words with multiple meanings.

[Previous page]   [Next page]

TD101E: Plain English Strategies

Question 8

Not yet answered

Points out of 1.00

⚑ Flag question

Below is a question aligned to a third-grade mathematics standard. There are multiple linguistic features in the wording of the question that present accessibility issues.

"If a shape is divided into halves, how many equal parts are there?"

Which Plain English strategy would address the accessibility issues found in the wording of the question?

Select one:
- ○ a. using the active voice and present tense
- ○ b. removing unnecessary detail
- ○ c. breaking long sentences into shorter ones
- ○ d. using bullets to list an item's details

[Previous page]   [Next page]

TD101E: Plain English Strategies

Question 9

Not yet answered

Points out of 1.00

⚑ Flag question

Below is a question aligned to an eighth-grade science standard. There are multiple linguistic features in the wording of the question that present accessibility issues.

"Which of the following would most likely result in a decrease in the diversity of organisms in a community by disturbing the balance of tolerant and intolerant organisms?"

What are the linguistic features in the wording of the question that present accessibility issues?

Select one:

○ a. the question is wordy and uses the passive voice.

○ b. The question uses negation and long noun phrases.

○ c. The question uses verbs that consist of two words and words with multiple meanings.

○ d. The question uses different words to describe a single concept and contains unclear pronouns.

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TD101E: Plain English Strategies

Question 10

Not yet answered

Points out of 1.00

⚑ Flag question

Below is a question aligned to an eighth-grade reading standard. There are multiple linguistic features in the wording of the question that present accessibility issues.

"Using the information in the text, what is the meaning of the word rerouted as used in paragraph 5?"

Which Plain English strategies would address the accessibility issues found in the wording of the question?

Select one:

○ a. using the active voice and the present tense

○ b. replacing unfamiliar words with simple, high-frequency words and avoiding idioms

○ c. using only necessary adjectives and avoiding words with multiple meanings

○ d. beginning the question with a question word and removing unnecessary detail

[Previous page]   [Finish attempt ...]

Previous: Pre Quiz Warning   Next: Certificate of Completion

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TD101E: Plain English Strategies

Plain English Quiz

Summary of attempt

Question	Status
1	Answer saved
2	Answer saved
3	Answer saved
4	Answer saved
5	Answer saved
6	Answer saved
7	Answer saved
8	Answer saved
9	Answer saved
10	Answer saved

Return to attempt

Submit all and finish

TD101E: Plain English Strategies

Successful completion of the activities of this course allows students to be eligible to receive a PDF certification of contact hours completed.

Summary of previously received certificates

Issued

Thursday, April 20, 2017, 5:11 PM

Click the button below to open your certificate in a new browser window.

Get your certificate

TD101C1_MAT: NC Math Standards Grades 3-8

Your progress ⑦

Introduction

The purpose of this course is to review the content standards to which test items must be aligned. This course will first present North Carolina's standards for this content area and then introduce their properties through the cognitive framework used to create the standards and the items.

At the end of each segment below, trainees will be asked to complete a short practice set that will prepare them for the Qualifying Quiz. Trainees may attempt each practice set an unlimited number of times.

It should take approximately one (1) hour to complete this online, self-directed course.

Grades 3–8 Mathematics Item Writing

North Carolina Mathematics Standards	☑
North Carolina Standard Course of Study for Mathematics Grades 3–8	☑
Alignment of Sample Item to Standard - Sample 1	☑
Alignment of Sample Item to Standard - Sample 2	☑
Alignment of Sample Item to Standard - Sample 3	☑
Alignment of Sample Item to Standard - Sample 4	☑
Math Grades 3–8 Alignment Practice Set	☑
What Makes a Strong Item	☑
Item Improvement - Sample 1	☑
Item Improvement - Sample 2	☑
Item Improvement - Sample 3	☑
Item Improvement - Sample 4	☑
Item Improvement Practice Set	☑
Achievement Level Descriptors	☐
ALD Sample Items	
Restricted Not available unless: The activity Achievement Level Descriptors is marked complete	
Prequiz Warning	
Restricted Not available unless: The activity ALD Sample Items is marked complete	
Qualification Quiz	☑

Next Steps

Next Steps	☑
Certificate of Completion	☐

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North Carolina Mathematics Standards

North Carolina *Standard Course of Study* for Mathematics Grades 3 - 8

HOW TO READ THE GRADE-LEVEL STANDARDS

The North Carolina *Standard Course of Study* for Mathematics is organized by domain, cluster, and individual standard.

The domain is a larger group of related standards. Within a domain, the standards are grouped into clusters. A cluster is a smaller group of related standards. The standard defines what students should understand and be able to do. Below is an example from grade 3:

[DOMAIN] Operations and Algebraic Thinking (OA)
[CLUSTER] Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- **[STANDARD]** 3.OA.8 Solve two-step word problems using addition, subtraction, and multiplication, representing problems using equations with a symbol for the unknown number.
- **[STANDARD]** 3.OA.9 Interpret patterns of multiplication on a hundreds board and/or multiplication table.

DOMAINS

Domains for Math Grades 3–5

    1 - Operations and Algebraic Thinking (OA)

    2 - Number and Operations in Base Ten (NBT)

    3 - Number and Operations - Fractions (NF)

    4 - Measurement and Data (MD)

    5 - Geometry (G)

Domains for Math Grades 6–7

    1 - Ratios and Proportional Relationships (RP)

    2 - The Number System (NS)

    3 - Expressions and Equations (EE)

    4 - Geometry (G)

    5 - Statistics and Probability (SP)

Domains for Math Grade 8

    1 - The Number System (NS)

    2 - Expressions and Equations (EE)

    3 - Functions (F)

    4 - Geometry (G)

    5 - Statistics and Probability (SP)

ABBREVIATIONS

Each standard is presented using abbreviations.

An example is 3.OA.8:

3: Grade Level 3

OA: Operations and Algebraic Thinking domain

8: The 8th standard within the Operations and Algebraic Thinking domain for grade 3.

Some standards have associated substandards. An example is 6.NS.6.a.

6: Grade Level 6

NS: The Number System domain

6: The 6th standard within the Number System domain for grade 6.

a: The first substandard under 6.NS.6.

REVIEW THE STANDARDS

Please visit the North Carolina Department of Public Instruction (NCDPI)/ K–12 Math Curriculum and Instruction google site to review the North Carolina *Standard Course of Study* for Mathematics.

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TD101C1_MAT: NC Math Standards Grades 3-8

North Carolina Standard Course of Study for Mathematics Grades 3–8

North Carolina *Standard Course of Study* for Mathematics Grades 3–8

STANDARDS FOR MATHEMATICAL PRACTICE

In addition to the content grade-level specific standards, the Standards for Mathematical Practice are expected to be integrated into every mathematics lesson for all students grades K–12. The Standards for Mathematical Practice describe varieties of expertise that mathematical educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council's report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently, and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

The following Standards of Mathematical Practice should be incorporated into items when appropriate.

The eight Standards of Mathematical Practice are:

   1 - Make sense of problems and persevere in solving them.

   2 - Reason abstractly and quantitatively.

   3 - Construct viable arguments and critique the reasoning of others.

   4 - Model with mathematics.

   5 - Use appropriate tools strategically.

   6 - Attend to precision.

   7 - Look for and make use of structure.

   8 - Look for and express regularity in repeated reasoning.

Last modified: Monday, April 1, 2019, 11:44 AM

TD101C1_MAT: NC Math Standards Grades 3-8

Home ▶ Courses ▶ Accountability ▶ Test Development ▶ TD101C1_MAT ▶ Grades 3–8 Mathematics Item Writing ▶ Alignment of Sample Item to Standard - Sample 1

Alignment of Sample Item to Standard - Sample 1

Assigned Standard: 3.NBT.2

Add and subtract whole numbers up to and including 1,000.

- Use estimation strategies to assess reasonableness of answers.
- Model and explain how the relationship between addition and subtraction can be applied to solve addition and subtraction problems.
- Use expanded form to decompose numbers and then find sums and differences.

Sample Item

School X used 488 pencils last year. School Y used 375 pencils last year. What is the total number of pencils the two schools used last year?

A. 753

B. 763

C. 853

D. 863

Explanation: This item aligns to the assigned standard.

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TD101C1_MAT: NC Math Standards Grades 3-8

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Alignment of Sample Item to Standard - Sample 2

Assigned Standard: 5.NF.7

Solve one-step word problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions using area and length models, and equations to represent the problem.

Sample Item - Does Not Align

A group of four friends will equally share $\frac{3}{4}$ of a cake. How much of the cake will each friend get?

A. $\frac{3}{16}$

B. $\frac{1}{3}$

C. $3\frac{1}{5}$

D. $5\frac{1}{3}$

Explanation: This item **does not align** to the assigned standard. The standard evaluates the division of <u>unit fractions</u> by <u>whole numbers</u> and <u>whole numbers</u> by <u>unit fractions.</u> This item however, involves dividing a a <u>nonunit fraction</u> by a <u>whole number</u>.

Sample Item - Does Align

A group of four friends will equally share $\frac{1}{2}$ of a cake. How much of the cake will each friend get?

A. $\frac{1}{2}$

B. $\frac{1}{4}$

C. $\frac{1}{6}$

D. $\frac{1}{8}$

Explanation: By changing the fraction from $\frac{3}{4}$ to $\frac{1}{2}$, the item now aligns to the assigned standard.

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TD101C1_MAT: NC Math Standards Grades 3-8

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Alginment of Sample Item to Standard - Sample 3

Assigned Standard: 6.EE.1

Write and evaluate numerical expressions, with and without grouping symbols, involving whole-number exponents.

Sample Item

What is the value of $2^3 + 8^2$?

A. 22

B. 24

C. 72

D. 105

Explanation: This item aligns to the assigned standard.

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Previous: Alginment of Sample Item to Standard -...   Next: Alignment of Sample Item to Standard -...

TD101C1_MAT: NC Math Standards Grades 3-8

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Alignment of Sample Item to Standard - Sample 4

Assigned Standard: 8.G.9

Understand how the formulas for the volumes of cones, cylinders, and spheres are related and use the relationship to solve real-world and mathematical problems.

Sample Item - Does Not Align

A rectangular sandbox is 48 inches long, 36 inches wide, and 12 inches deep. What is the volume of the sandbox?

A. 96 cubic inches

B. 192 cubic inches

C. 10,368 cubic inches

D. 20,736 cubic inches

Explanation: This item **does not align** to the standard. The standard states to use the formulas for volumes of <u>cones, cylinders, and spheres</u>. This item involves finding the volume of a <u>rectangular prism</u>.

Sample Item - Does Align

A cylindrical tube has a diameter of 5 inches and a height of 25 inches. What is the *approximate* volume of the tube?

A. 196 cubic inches

B. 393 cubic inches

C. 491 cubic inches

D. 1,963 cubic inches

Explanation: In order to meet the assigned standard a completely new item needed to be developed. Notice that the item now involves determining the volume of a cylinder, which aligns to the assigned standard.

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Previous: Alginment of Sample Item to Standard -...   Next: Math Grades 3–8 Alignment Practice Set

Math Grades 3–8 Alignment Practice Set

This practice will help trainees identify any aspects of item writing in which they might need reinforcement. It is scored, but it doesn't count; and trainees can take it as many times as they want.

Trainees may use the standards and any notes they may have taken while completing the activity.

Grading method: Highest grade

What Makes a Strong Item

When writing items, be aware of the following concerns. Attending to these concerns will make stronger items.

1. Items should not be overly wordy. They should contain only pertinent information.
2. Choose the wording of the items carefully. Avoid wording that gives context clues to what the key will be (e.g. 'the smallest amount').
3. Answer choices should contain common student errors.
4. Answer choices should contain only one correct answer.
5. Answer choices should not give away the key (e.g., be the only large number).
6. Answer choices should not have overlapping ranges. Answer choices should be mutually exclusive (e.g., use 1–2, 3–4, 5–6, 7–8 instead of 1–2, 2–3, 3–4, 4–5.)
7. Avoid teaching in the stem (e.g. providing information that teaches students material about a specific topic.)
8. Make sure that the item is realistic, both in context and mathematically.
9. Keep units consistent within the item.
10. Make sure the item is not ambiguous. Be precise about what is being described.
11. Do not create an item that can be solved correctly by using incorrect reasoning or by applying wrong methods.
12. Avoid clang association.

The next few pages will present weak items based on some of the issues stated above and will show how to make the items stronger.

Last modified: Wednesday, March 15, 2017, 7:34 AM

Item Improvement - Sample 1

Weak Item

Marilyn and Linda work in a computer factory. Marilyn works Monday through Friday. Linda works Tuesday through Saturday. Marilyn packages 10 computers an hour. Linda packages 4 more computers an hour than Marilyn. How many computers can the two package in 6 hours?

A. 64

B. 84

C. 124

D. 144

Explanation

The item has a lot of unnecessary wording. By removing the unnecessary wording, we are able to create an item that is easier to read.

Improved Item

Marilyn and Linda work in a computer factory. Marilyn packages 10 computers an hour. Linda packages 4 more computers an hour than Marilyn. How many computers can the two package in 6 hours?

A. 64

B. 84

C. 124

D. 144

Last modified: Wednesday, July 22, 2020, 11:24 AM

Item Improvement - Sample 2

Weak Item

What is the value of $\frac{3}{2} \times \frac{2}{5}$?

A. $\frac{6}{10}$

B. $\frac{5}{7}$

C. $\frac{6}{7}$

D. $\frac{3}{5}$

Explanation

The item has two correct answers. Foil A and Foil D are equivalent forms of the same fraction. Every item should have only one correct answer.

Improved Item

What is the value of $\frac{3}{2} \times \frac{2}{5}$?

A. $\frac{6}{5}$

B. $\frac{5}{7}$

C. $\frac{6}{7}$

D. $\frac{3}{5}$

Explanation

The item now has only one correct answer.

Last modified: Monday, March 6, 2017, 9:19 AM

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Item Improvement - Sample 3

Weak Item

A rectangle has a perimeter of 48 cm. The length of the rectangle is twice the width. What is the length of the rectangle?

A. 96 cm

B. 50 cm

C. 24 cm

D. 16 cm

Explanation

Foils A and B are poor answer choices. The perimeter of the rectangle is 48 cm, so without doing any work, a student can eliminate choices A and B because they are both larger than the perimeter. Foils A and B should be revised so a student is unable to easily eliminate the foils based on the information given in the stem of the item.

Improved Item

A rectangle has a perimeter of 48 cm. The length of the rectangle is twice the width. What is the length of the rectangle?

A. 8 cm

B. 12 cm

C. 16 cm

D. 24 cm

Explanation

With all the foils being less than 48, the student can no longer rule out answer choices as being obviously incorrect. Secondarily, the revised foils are common mistakes. Foil B is 48 divided by 4. Foil A is the width of the rectangle.

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Item Improvement - Sample 4

Weak Item

Carter recorded the daily high temperature for seven days in the table below.

Day	Temperature (°F)
1	31°
2	34°
3	22°
4	17°
5	16°
6	12°
7	22°

What is the mean temperature for his data?

A. 16°

B. 17°

C. 22°

D. 31°

Explanation

For these data, the mean, median, and mode all equal 22. A student does not have to distinguish between the different measures of central tendency. The item does not assess a student's knowledge of mean.

Improved Item

Carter recorded the daily high temperature for seven days in the table below.

Day	Temperature (°F)
1	30°
2	34°
3	22°
4	17°
5	16°
6	12°
7	16°

What is the mean temperature for his data?

A. 16°

B. 17°

C. 21°

D. 31°

Explanation

By changing the first and last temperature in the table, the mean, median, and mode are now all different. The item better assesses a student's knowledge of mean.

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TD101C1_MAT: NC Math Standards Grades 3-8

Item Improvement Practice Set

This practice set will help trainees identify any aspects of item writing in which they might need reinforcement. It is scored, but it doesn't count; and trainees can take it as many times as they want.

Trainees may use the standards and notes they may have taken while completing the activity.

Grading method: Highest grade

Question 1

Not complete

Points out of 1.00

⚑ Flag question

Which statement is true about the item shown below?

Frank is having a sleepover and invites 6 friends. In the morning, they eat cereal for breakfast. A serving of the cereal is $\frac{3}{4}$ cup. They eat a total of 12 servings. How many total cups of cereal did they eat?

A. 12 cups

B. 9 cups

C. 4.5 cups

D. 1.5 cups

Select one:

○ a. The item has unnecessary wording.

○ b. There is nothing wrong with this item.

○ c. The item does not have realistic data.

○ d. The item foils give away the correct answer.

[Check]

Question 2

Not complete

Points out of 1.00

⚑ Flag question

An item is shown below.

A rectangle has a width of 3 meters and a length of 6 meters. What is the area of the rectangle?

A. 9 square meters

B. 12 square meters

C. 15 square meters

D. 18 square meters

Which statement is true about the item?

Select one:

○ a. The item is ambiguous.

○ b. The answer choices give away the key.

○ c. The item can be solved correctly using incorrect reasoning.

○ d. There is nothing wrong with this item.

[Check]

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Question 3

Not complete

Points out of 1.00

⚑ Flag question

An item is shown below.

A circle is is drawn in the coordinate plane as shown below.
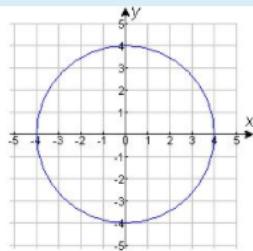
Which statement is true about the point (3, 2)?

A. The point lies outside the circle.

B. The point lies inside the circle.

C. The point is on the circle.

D. The point is the center of the circle.

Which statement is true about the item?

Select one:

○　a. This item contains wording in the stem that gives away the correct answer.

○　b. This item contains foils that do not include common errors.

○　c. The item contains foils that are overlapping.

○　d. This item contains teaching within the stem.

Check

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Question 4

Not complete

Points out of 1.00

⚑ Flag question

Which statement is true about the item below?

Mrs. Kramer records the time, in seconds, of eight of her students in the 100 meter run. The times are displayed in the table below.

14.8	6.9
12.3	7.1
10.9	10.9
11.4	11.3

What is the median time for the eight students?

A. 11.40 seconds

B. 11.20 seconds

C. 11.10 seconds

D. 10.90 seconds

Select one:

○ a. The item contains foils that do not contain common student mistakes.

○ b. The item does not have realistic data.

○ c. The item contains answer choices that give away the correct answer.

○ d. The item can be solved by using incorrect mathematical reasoning.

[Check]

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Previous: Item Improvement - Sample 4   Next: Achievement Level Descriptors

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Achievement Level Descriptors

An Achievement Level Descriptor is used to explain the knowledge, skills, and processes that students display on the EOG or EOC. There are 4 Achievement Level Descriptors:

Achievement Level	Meets On-Grade-Level Proficiency Standard	Meets Career-and-College Readiness Standard
Level 5	Yes	Yes
Level 4	Yes	Yes
Level 3	Yes	No
Not Proficient	No	No

Not Proficient - Students who are Not Proficient demonstrate inconsistent understanding of grade level content standards and will need support.

Level 3 - Students at Level 3 demonstrate sufficient understanding of grade level content standards though some support may be needed to engage with content at the next grade/course.

Level 4 - Students at Level 4 demonstrate a thorough understanding of grade level content standards and are on track for career and college.

Level 5 - Students at Level 5 demonstrate comprehensive understanding of grade level content standards, are on track for career and college, and are prepared for advanced content at the next grade/course.

Item writers and item reviewers will be asked to assign an Achievement Level Descriptor (ALD) to the content and skill level of each item. Ensuring that our items are aligned to our standards as well as our ALDs will help us better understand student performance and ensure the appropriate depth and rigor for all assessments.

The following links contain the achievement level descriptors for Mathematics. Please print the documents and keep them as a reference when writing and reviewing items.

Mathematics EOGs

NC Math 1 and NC Math 3 EOCs

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Previous: Item Improvement Practice Set

Next: ALD Sample Items

ALD Sample Items

ALD Level 3 Sample Grade 3

Standard: 3.NF.3.

ALD Level 3: Represent equivalent fractions using area models.

Which figure shows a shaded amount that is equivalent to the fraction $\frac{2}{6}$?

A

B

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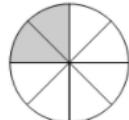
ALD Level 3 Sample Grade 8

Standard: 8.F.4

ALD Level 3: Write an equation in slope-intercept form given a graph.

What is the equation of the line graphed below?
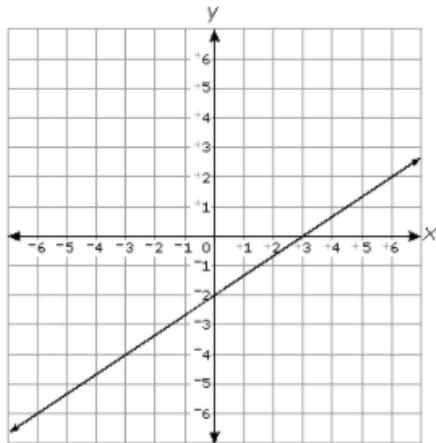
A $y = \frac{2}{3}x - 2$

B $y = \frac{2}{3}x + 3$

C $y = \frac{3}{2}x - 2$

D $y = \frac{3}{2}x + 3$

ALD Level 4 Sample Grade 5

Standard: 5.NBT.5

ALD Level 4: Multiply a three-digit number by a two-digit number using the standard algorithm in real-world word problems.

A supermarket has 238 large boxes of cereal. Each large box holds 32 small bags of cereal. How many small bags of cereal are in the supermarket?

A   6,506 bags

B   6,616 bags

C   7,506 bags

D   7,616 bags

ALD Level 4 Sample Grade 7

Standard: 7.EE.1

ALD Level 4: Add, subtract, and expand linear expressions with rational coefficients.

Which expression is equivalent to $\frac{1}{2}(2n + 6)$?

A $\frac{1}{2} + 2n + 6$

B $2\frac{1}{2}n + 6\frac{1}{2}$

C $n + 6$

D $n + 3$

ALD Level 5 Sample Grade 4

Standard: 4.MD.6

ALD Level 5: Solve multistep problems involving the addition and subtraction of angle measurements."

RVU is a straight line and ∠*TVU* has a measure of 40° in this figure.
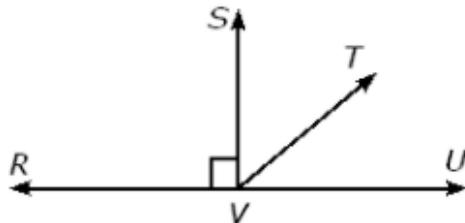
What is the measure of ∠*SVT*?

A   40°

B   45°

C   50°

D   90°

ALD Level 5 Sample Grade 6

Standard: 6.RP.3

ALD Level 5: Solve multiple unit conversions of different quantities in the ratio (converting and multiplying measurements).

A motorcycle can go 50 miles using one gallon of gas. **About** how many gallons of gas will be used to go 150 kilometers?

(Note: 1 mile is approximately 1.6 kilometers.)

A   5 gallons

B   3 gallons

C   2 gallons

D   1 gallon

Last modified: Monday, July 12, 2021, 12:08 PM

Prequiz Warning

The quiz that follows this page (Qualification Quiz) is a graded quiz. It is recommended that trainees review any content that was covered in this course or any previous course including the content standards before beginning this quiz.

Trainees will now be presented with a set of 10 questions. This quiz is not timed, but it does count; whereas the practice set did not. Trainees may use any notes they may have made.

To qualify for an initial item writing or reviewing contract, trainees must pass with a minimum score of 80%.

Last modified: Wednesday, July 22, 2020, 11:22 AM

Qualification Quiz

This quiz will assess trainees' understanding of the standards and item writing practices for Mathematics Grades 3–8. In order to be an item writer or reviewer, trainees must achieve a minimum score of 80% [8/10]. This quiz can be attempted as many times as necessary to achieve a minimum score.

Click **ONLY** the Previous Page and Next Page buttons while in the quiz. **DO NOT** click the Previous or Next links at the bottom of the page until the quiz has been successfully completed.

Grading method: Highest grade

TD101C1_MAT: NC Math Standards Grades 3-8

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101C1_MAT ▸ Grades 3–8 Mathematics Item Writing ▸ Qualification Quiz

Question 1

Not yet answered

Points out of 1.00

⚑ Flag question

The item shown below was written to assigned standard 3.OA.7.

Jane bought 8 packages of markers. Each package held 6 markers. How many total markers did Jane buy?

A. 14

B. 24

C. 46

D. 48

Which statement is true about the item?

Select one:
- ○ a. The item matches the assigned standard.
- ○ b. The item aligns to 3.OA.8.
- ○ c. The item aligns to 4.OA.3.
- ○ d. The item aligns to 4.OA.5.

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TD101C1_MAT: NC Math Standards Grades 3-8

Home ▸ Courses ▸ Accountability ▸ Test Development ▸ TD101C1_MAT ▸ Grades 3–8 Mathematics Item Writing ▸ Qualification Quiz

Question 2

Not yet answered

Points out of 1.00

⚑ Flag question

The item shown below was written to assigned standard 4.NF.4.

Jorge poured 38 gallons of water into 6 buckets. He poured the same amount of water into each bucket. How much water did Jorge pour into each bucket?

A. $6\frac{4}{6}$

B. $6\frac{1}{2}$

C. $6\frac{1}{3}$

D. $6\frac{1}{6}$

Select one:
- ○ a. The item matches the assigned standard.
- ○ b. The item aligns to 5.NF.3.
- ○ c. The item aligns to 5.NF.4.
- ○ d. The item aligns to 5.NF.7.

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Question 3

Not yet answered

Points out of 1.00

⚑ Flag question

The item shown below was written to assigned standard 7.EE.1.

What is the value of x in the equation $3(2x + 10) = 60$?

A. 5

B. $8\frac{1}{3}$

C. $11\frac{2}{3}$

D. 15

Which statement is true about the item?

Select one:

○ a. The item matches the assigned standard.

○ b. The item aligns to 7.EE.2.

○ c. The item aligns to 7.EE.4.

○ d. The item aligns to 8.EE.7.

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TD101C1_MAT: NC Math Standards Grades 3-8

Question 4

Not yet answered

Points out of 1.00

⚑ Flag question

The item shown below was written to assigned standard 7.G.4.

A circular pond has a radius of 20 feet. What is the *approximate* distance around the pond?

A. 63 feet

B. 126 feet

C. 1,257 feet

D. 5,027 feet

Which statement is true about the item?

Select one:

○ a. The item matches the assigned standard.

○ b. The item aligns to 7.G.2.

○ c. The item aligns to 7.G.5.

○ d. The item aligns to 7.G.6.

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TD101C1_MAT: NC Math Standards Grades 3-8

Question 5

Not yet answered

Points out of 1.00

⚑ Flag question

An item is shown below.

Kylie finished $\frac{1}{2}$ of her class assignment. She finished $\frac{1}{4}$ of her homework assignment. How much of her total assignment has she finished?

A. $\frac{1}{8}$

B. $\frac{1}{4}$

C. $\frac{1}{2}$

D. $\frac{3}{4}$

Which statement is true about the item?

Select one:

○ a. There is nothing wrong with this item.

○ b. The item creates ambiguity with the way it is written.

○ c. There is teaching taking place within the stem of the item.

○ d. The answer choices do not include any common student mistakes.

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Question 6

Not yet answered

Points out of 1.00

⚑ Flag question

An item is shown below.

What is the value of m when $6 + m = 8$?

A. 2

B. 4

C. 12

D. 14

Which statement is true about the item?

Select one:

○ a. There is nothing wrong with this item.

○ b. The answer choices have more than one correct answer.

○ c. The item creates ambiguity with the way that it is written.

○ d. The answer choices has choices that give away the correct answer.

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Question 7

Not yet answered

Points out of 1.00

⚑ Flag question

An item is shown below.

James is working on a project. He finished $\frac{2}{3}$ of the project in class. He finished $\frac{1}{2}$ of the project at home. How much of the project does he have left to finish?

A. $\frac{1}{6}$

B. $\frac{1}{4}$

C. $\frac{2}{6}$

D. $\frac{3}{5}$

Which statement is true about the item?

Select one:
- ○ a. The answer choices give away the correct answer.
- ○ b. There is an excessive amount of wording in the stem.
- ○ c. There is nothing wrong with this item.
- ○ d. The item is not realistic.

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Previous: Prequiz Warning   Next: Next Steps

# TD101C1_MAT: NC Math Standards Grades 3-8

Question 8

Not yet answered

Points out of 1.00

⚐ Flag question

An item is shown below.

A figure is shown below.
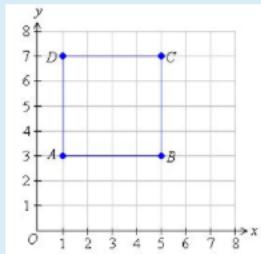
Which describes the figure?

A. parallelogram

B. rectangle

C. square

D. trapezoid

Which statement is true about the item?

Select one:

○ a. There is one answer choice that is very different then the other answer choices.

○ b. There is nothing wrong with this item.

○ c. There is teaching taking place within the stem of the item.

○ d. The item contains overlapping answer choices.

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Question 9

Not yet answered

Points out of 1.00

⚑ Flag question

An item is shown below.

The Pythagorean Theorem, $a^2 + b^2 = c^2$, can be used to determine the third side of a right triangle given the first two sides. The legs of a right triangle are 9 inches and 40 inches. What is the length of the hypotenuse?

A. 1,681 inches

B. 360 inches

C. 49 inches

D. 41 inches

Which statement is true about the item?

Select one:

○ a. The student can correctly solve the item using the wrong reasoning.

○ b. There is nothing wrong with this item.

○ c. The answer choices do not include common student mistakes.

○ d. There is unnecessary teaching taking place within the stem of the item.

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TD101C1_MAT: NC Math Standards Grades 3-8

Question 10

Not yet answered

Points out of 1.00

⚑ Flag question

An item is shown below.

What is the greatest common factor of 8 and 50?

A. 400

B. 200

C. 58

D. 2

Which statement about the item is correct?

Select one:

○ a. There is teaching taking place within the stem of the item.

○ b. The item has answer choices that do not contain common student mistakes.

○ c. There is nothing wrong with this item.

○ d. The item has answer choices that cue the correct answer.

[Previous page]　　　　　　　　　　　　　　　　[Finish attempt ...]

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Next Steps

Congratulations!

Upon completion of this course, trainees are invited to continue learning on the other B level course or other C level courses. Additionally, and most importantly, trainees can apply to be an item writer or reviewer by completing an online interest form.

If trainees would like to obtain a PDF certificate indicating completion of this course for their records, please click the Next link below or navigate back to the course outline and click the Certificate of Completion resource.

[Click this link to go to the online application for item writing and reviewing]

[Click here to navigate back to the list of courses in the Test Development training series]

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