Tennessee Department of Education

Common Core Leadership Course 202

Elementary School Class 1

The contents of this manual were developed under a grant from the U.S. Department of Education. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.
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Welcome to Common Core Leadership 202.

Our Goal in this Course:
Support collaborative leadership learning focused on increasing student achievement in the transition to Common Core State Standards.

How Will We Achieve that Goal:
• Peer-Led Discussions and Collaboration
• Direct Applications to Our Classrooms and Schools
• A Focus on Student Work

Course Norms:
• Keep students at the center of focus and decision-making.
• Balance urgency and patience.
• Be solutions-oriented.
• Speak Up!
• We need collective solutions. Be present and engaged.
• Challenge with respect.
• Risk productive struggle.
• Monitor airtime and share your voice.
Course Overview

Class 1
What can we do to improve student work?

Class 2
How do we advance students further?

Class 3
What progress have students made?
What drove progress?

Notes:
**Bridge to Practice Overview**

In Leadership 202, we will take on two of the hardest and most important questions we face as leaders in education:

- How do we help all students comprehend complex texts and write effective analyses?
- How do we help all students master the most challenging math content in each grade?

All activities and assignments in Leadership 202 will focus on student work. **Participants will all be asked to partner with two teachers and two groups of students – a math teacher and a math class and a literacy teacher (across any relevant content area) and a group of students.** Specific information about the sequence of activities for each content area is outlined below:

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<th>Prior to Class 1</th>
<th>Literacy</th>
<th>Math</th>
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<tr>
<td><strong>Prior to Class 1</strong></td>
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<tr>
<td>- Select partner teacher and students</td>
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<td>- Students complete cold response to one assigned literacy task</td>
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<td>- Collect and bring student work to class one</td>
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<td>- (More details about the Class One assignment are included below)</td>
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<tr>
<td><strong>In Class 1</strong></td>
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<tr>
<td>- Analyze student work</td>
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<td>- Review key strategies for writing</td>
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<td>- Develop a plan for next steps</td>
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<td>- Analyze student work</td>
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<td>- Review key strategies in mathematics</td>
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<tr>
<td>- Develop questions for students</td>
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<tr>
<td><strong>Between Class 1 and Class 2</strong></td>
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<tr>
<td>- With partner teacher, conduct a close reading of the text and prompt with students</td>
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<td>- Review model essays with students</td>
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<td>- Students plan new essays</td>
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<td>- Collect and bring student prewriting to class two</td>
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<tr>
<td>- With partner teacher, conduct a lesson using questions to advance student understanding</td>
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<td>- Students complete a second task</td>
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<td>- Collect and bring student work</td>
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<tr>
<td><strong>In Class 2</strong></td>
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<tr>
<td>- Analyze student prewriting</td>
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<td>- Review research on best practices on providing feedback (peer and teacher delivered)</td>
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<td>- Analyze student work on task 2</td>
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<td>- Review math intervention strategies</td>
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<td>- Determine plan for remediation</td>
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<tr>
<td><strong>Between Class 2 and Class 3</strong></td>
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<tr>
<td>- With partner teacher, provide feedback on prewriting</td>
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<td>- Students revise or rewrite essay</td>
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<td>- Provide feedback on draft 2 (teacher and peer)</td>
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<td>- Students complete final draft</td>
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<td>- Collect and bring student work to class three</td>
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<td>- With partner teacher, conduct one class of activities to remediate</td>
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<td>- Students who did not demonstrate evidence of understanding complete task 3</td>
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<tr>
<td>- Collect and bring student work</td>
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<td><strong>In Class 3</strong></td>
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<tr>
<td>- Analyze and score final student work</td>
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<td></td>
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<tr>
<td>- Analyze and score final student work</td>
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Other topics and exercises that will be covered in Leadership Course 202:

Overall:
- Summer training offerings
- PARCC support offerings & Practice Test Info
- Formative assessment timeline / info
- Resource guides

Math:
- PARCC sample items, evidence tables
- Key components of good math instruction (assessing v. instructional tasks, how direct instruction fits in, essential understandings, goal orientation)
- Looks fors – how can you tell if a lesson is working towards a clear goal?
- Fluency
- Findings from CRA – key content gaps
- Task Arcs
- Videos

ELA/literacy:
- PARCC sample items, evidence tables
- Units
- More on text complexity – illustration of college level text
- Vocabulary instruction
- Look fors – how can you tell if a less is rigorous?
- Elementary – review simple view of reading
- Secondary – integrating literacy instruction
- Findings from student surveys / writing results
Earning a living wage has never demanded more skills. This generation must learn more than their parents’ to do as well.

Tennessee is on a mission to become the fastest improving state in the nation. Doing so will require hard work and significant learning for all. We must learn to teach in ways we were not taught ourselves.

There is no recipe that will deliver a successful transition. Preparing for Common Core will demand effective leadership focused on student growth.

All children are capable of learning and thinking at a high level. Children in Tennessee are as talented as any in the country and often capable of more than we expect.

Our current education results pose a real threat to state and national competitiveness and security. Improving the skills of our children is vital for the future of Tennessee and America.

PARCC is coming. We need to use the transition wisely to make sure our students and our state are ready.
20 Things Every Tennessee Teacher Should Know about the PARCC Assessment

PARCC stands for the Partnership for Assessment of Readiness for College and Career. A partnership of 18 states and the District of Columbia, PARCC is developing math and English language arts / literacy assessments in grades 3-11. Beginning in the 2014-15 school year, the PARCC math and English language arts assessments (ELA) will replace the Achievement and End of Course math and ELA assessments as part of the Tennessee Comprehensive Assessment Program (TCAP).

PARCC is still in the design process. Test blueprints have been developed and released and the first round of items has been developed and reviewed by educators in Tennessee. Tennessee, along with other PARCC states, will participate in a field test of these items during spring, 2014. As with the field test for all TCAP assessments, the PARCC field test will help the consortia make final decisions about the design and scoring of the assessments. With Tennessee’s strong support, PARCC is committed to creating high quality tests that will be improved over time based on results and feedback from all of the member states.

Based on the design of tests as of October 2013, here are 20 things every Tennessee teacher should know about PARCC:

1) **Tennesseans helped build PARCC.** Tennessee is a governing state in PARCC and Tennessee educators from K-12 schools and from institutions of higher education have participated in the design of PARCC and reviewed items for content and for bias and sensitivity. Together with other states, we are building the PARCC assessments.

2) **The Tennessee Comprehensive Assessment Program (TCAP) will include the PARCC Assessments in grades 3-11 in Math and English Language Arts / Literacy.** Beginning in the 2014-15 school year, the PARCC assessments will replace the Achievement and End of Course tests for math and English language arts (ELA) as part of the Tennessee Comprehensive Assessment Program (TCAP). We will continue to have Achievement and End of Course exams in science and social studies as part of TCAP.

3) **Participating in PARCC will allow Tennesseans to see how our state performs and grows over time in math and English language arts / literacy compared to other PARCC states.** Right now, with each state developing its own tests, there is no way to know how our students’ growth and performance compares with our neighbor’s performance or pace of growth. Working with other states to develop and administer PARCC will allow us to see how our students’ achievement level and pace of growth compares to other PARCC states every year and will allow us to learn from others.

4) **The PARCC assessments will be given in two separate windows during the year: a Performance-Based Assessment Component in February or March and an End of Year Assessment Component in April.** There will be a block schedule administration available for both the Performance-Based Assessment and the End of Year Assessment (which will be called the End of Course Component in high school) in the fall and winter. Unlike the Achievement and End of Course math and reading assessments, not all of the testing will happen at the end of the course or year.

5) **Students’ final scores will reflect their performance on both the Performance Based Assessment and the End of Year Assessment.** The Performance Based Assessment will include all of the questions that students have to perform a task not just pick an answer – for example, write an essay or create a model. The Performance Based Assessment has three parts ELA/Literacy and two parts math. The End of Year Assessment has two parts math, two parts ELA/Literacy. The final student score will be based on performance across all the components (students will not get a different score for each component).

*This list represents the best information about the PARCC assessment as of October 2013. As is true of any assessment design process, there may be changes to the PARCC design informed by ongoing feedback and the field test.*
6) **Sixty percent of the PARCC ELA / literacy assessment will involve writing.** Unlike previous assessments that chiefly assess ELA through multiple choice questions, writing will be a key element of PARCC. You can learn about the three writing task types in more detail and see sample items [here](#).

7) **More than 60 percent of the math questions will focus on the math standards that have been identified as the “major work of the grade” (as outlined in the PARCC Model Content Frameworks – see [here](#)).** Unlike the Achievement and End of Course math assessments, with small number of items on every State Performance Indicator (SPI), there will be more questions on certain standards on the PARCC math assessment. Students who do well with the major work of the grade in math will do well on PARCC.

8) **The PARCC math and ELA / literacy assessments will include many different types of questions.** There will be questions that ask students to do something – these are typically called constructed response questions. All constructed response questions will part of the Performance Based Assessment window to allow for hand scoring by the end of the year. There will also be multiple choice questions and interactive technology questions – questions that require students to drag and drop items or type an answer where no choices are given or select from many options. All of these questions will be able to be scored automatically. The End of Year component will only include questions that are automatically scored.

9) **Constructed response and writing questions will be hand-scored by trained reviewers.** Reviewers will go through in-depth training on how to use the rubric, similar to the training on our current writing assessment, to ensure fairness and consistency. Multiple reviewers will score each assessment, and a third reviewer will examine student scores if there is a discrepancy in the scoring. This scoring process is a similar approach to the scoring of the writing assessments students have taken for many years.

10) **There will be accommodations and accessibility features that allow all students to have the support they need to do well on PARCC.** Unless a student’s Individualized Education Program (IEP) team determines that the student will participate in the portfolio assessment, he or she will participate in the new PARCC assessment. PARCC is being designed to be accessible for all students other than those taking the Portfolio assessment (the MAAS assessment will no longer be administered beginning in the 2014-15 school year.) Students with disabilities will be able to use accommodations specific to the PARCC assessment chosen by their IEP teams. More information about these accommodations can be found [here](#).

11) **The PARCC portion of TCAP will be administered online,** and there will be a paper-pencil back up option at first. Not all students will take the PARCC tests at the same time, as typically has been the case with the Achievement and End of Course paper-pencil assessments. Groups of students will cycle through different test parts during a window of several weeks and return to class and continue learning throughout the window. Students will only work on assessments for a few days within the testing window.

12) **There will not be questions on the ELA/Literacy assessments that test grammar in isolation; grammar will be assessed through students’ writing.** On PARCC, grammar is assessed solely through writing. There will not be stand-alone multiple choice questions assessing grammar.

13) **All passages on the ELA/Literacy parts will come from an authentic text.** The PARCC passage selection guidelines state: “The texts students encounter on tests should be worthy of careful attention, be content rich and challenging, and exhibit professional published quality.” Unlike previous assessment passages, written for the purpose of the test, PARCC will feature only previously published texts.

14) **Multiple-choice and selected-response questions on the ELA/Literacy Assessments will focus on reading and vocabulary.** All multiple-choice questions will be based on a text and require students to provide evidence to

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support their answer. Additionally, vocabulary questions will focus on meaning as presented in the text. Students will not be expected to have prior knowledge of the subject or content of the text.

15) **Tennessee will offer the PARCC high school level math assessments for both the traditional course sequence (Algebra I, Geometry and Algebra II) and for the integrated course sequence (Math I, Math II and Math III).** Unlike the previous End of Course offerings which only followed the traditional sequence with Algebra I and Algebra II tested, PARCC will offer the full suite of assessments for both traditional and integrated courses. Click [here](#) for more information on the mathematics pathways.

16) **Students will get partial credit for some questions in math.** On some of the constructed response math questions, students can receive partial credit if they demonstrate understanding of a concept. Students will need to generate a precise and accurate answer in order to earn full point value.

17) **In grades 1-6, there will be math questions that assess students’ speed and accuracy with basic procedures without a calculator, (i.e., their math fluency).** The list of fluency standards can be found [here](#). Beyond grade 6 will have fluency standards, but there will not be a fluency component of the PARCC assessment.

18) **In grades 6 and beyond, PARCC will have calculator and non-calculator sections.** Assessments in grades 3-5 will not allow the use of a calculator. Assessments in grades 6-7 will allow for a four-function plus square root calculator, assessments in grade 8 will allow for a scientific calculator, and assessments in high school will allow for a calculator similar in functionality to a TI-84 graphing calculator. PARCC’s calculator policy can be accessed [here](#).

19) **Students will have a math reference sheet for grades 5 and higher.** Students in grades 3 and 4 will not be provided a reference sheet. Reference sheets for grades 5-8 and for high school will be available to students during the assessment.

20) **Students who do well on PARCC will know they are ready for college and career.** PARCC will ask students to do the kind of work they will need to do to be ready for college and career. Tennessee public institutions of higher education have agreed to use students’ performance on the PARCC assessment as an indicator of readiness for credit bearing work. PARCC will give students and parents clear information about whether they are on track towards meaningful options in life.

If you have additional questions about the PARCC assessment, please go to the PARCC section of the TNCore website at [www.TNCore.org](http://www.TNCore.org) or email your questions to [TNCore.Questions@tn.gov](mailto:TNCore.Questions@tn.gov).

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*This list represents the best information about the PARCC assessment as of October 2013. As is true of any assessment design process, there may be changes to the PARCC design informed by ongoing feedback and the field test.*
Idea Lab

This fall, we tried something called the "The Idea Lab." The purpose was to better understand where teachers are making instructional shifts and where we are seeing gaps in the transition to Common Core State Standards.

The two reasons we are sharing this information with you are:

- To share the findings at the state level in case they help in your own thinking and planning.
- To share our process for creating the Idea lab at the state level to use as guidance if you decide to create something similar in your schools and districts to pull out your own findings.

The process involved three steps:
1. Form a committee and have all committee members engage in a set of common field work (observations, conversations with teachers and students, review of work artifacts)
2. Facilitate a group discussion of progress and gaps and come up with ideas to target those gap areas.
3. Synthesize findings

Here are our Findings at a State Level

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<th>MATH</th>
<th>Progress</th>
<th>Gaps</th>
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| 1) Are teachers spending time on the right content? | - Pacing guides have generally eliminated the dropped SPIs, especially in grades 3-8.  
- Common Core State Standards are usually included in district pacing guides, often alongside SPIs.  
- A sample of pacing guides show an allocation of about 50 percent of instructional time to focus clusters.  
- There is a feeling that teachers are spending more time on content and understanding and feeling less pressure to cover all standards quickly.  
- There is some evidence of teachers integrating multiple standards into a single day, instead of completing a standard per day | - Still not enough time on focus content.  
- Pacing guides show that not enough time is planned to be spent on additional standards.  
- There is a lack of evidence about whether high school courses have stopped teaching the dropped SPIs and their progress in the transition.  
- Administrators still want checklist of standards covered.  
- There is a disconnect between formative assessments and how the focus content is assessed.  
- Many textbooks have not been adapted to reflect the focus content and spending different amounts of time on different standards. |

| 2) Are students getting regular practice with demanding tasks? | - More rigorous math tasks are being used, especially in grades 3-5.  
- Teachers are more aware of importance of rigor and the importance of analyzing tasks for rigor.  
- Students are exhibiting more stamina on the 2013 CRA leading to fewer blank responses and students attempting more items.  
- The released task arcs are useful and recognized as high quality resources.  
- There seems to be better | - The demand of tasks is still not as rigorous as it could be.  
- K-2 instructional and assessment tasks are not being widely used.  
- There appears to be less usage of tasks in middle grades than in elementary.  
- Task arcs aren’t being used as full units; teachers are generally using parts of the task arcs.  
- Overall, there is a lack of understanding of larger goals or understandings instruction is driving toward with tasks. Teachers might be using a task but
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<th>ELA</th>
<th>Progress</th>
<th>Gaps</th>
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| 1) Are students receiving daily practice citing evidence in conversation, writing and/or research?  | • Students are being asked to cite evidence more often in writing and conversation.  
• There is some variation in the frequency and medium used to provide evidence.  
• This shift is especially evident in English language arts classrooms. | • Although there has been progress, there are still gaps in citing evidence.  
• This gap is more pronounced in content areas other than English language arts.  
• There seems to be a limited understanding of the purpose of citing evidence and how it can help students better understand both the content and the text. |
| 2) Are teachers selecting appropriately complex texts that reflect the needed balance of informational text and fiction?  | • Teachers are using more nonfiction texts in English language arts classes.  
• There seems to be interest and enthusiasm from both teachers and students about reading nonfiction.  
• The balance of fiction and nonfiction is improving in all grade levels, and there is more reading beyond textbooks in many subjects. | • Teachers seem to struggle to with knowing how and where to go to select quality additional texts or other resources when or if they feel the textbook is not complex enough.  
• The biggest area of struggle in determining text complexity seems to be in the qualitative measure; teachers are more familiar with using a quantitative measure and considering the interest and ability of the students. |
| 3) Are students receiving regular practice with and feedback on their writing?  | • There is evidence of students writing more in both English language arts and content area classes.  
• More assignment in writing are based on a text than previously.  
• Educators show a sense of urgency around improving student writing. | • Teachers seem to struggle to understand what to focus on in providing feedback, both in content area classes and English language arts.  
• Content area teachers seem unclear of their role in developing students writing abilities and how to incorporate text based writing. |

Next Steps at the State Level:
- We will be developing exercises that focus on these key challenges for the leadership course 202.
- We have shared these findings with CORE Directors and we are working on support tools.
- We will incorporate these focus areas in summer training, especially;
  - Writing
  - Critical Math Content
Process:

As we noted, one of the purposes of this document is to help districts replicate the process to pull out their own findings. The next three pages contain resources for use in using this process for reflection at the local level.

The field work and discussion focused on the following key questions:

**ELA**
- Are students receiving daily practice citing evidence in conversation, writing and/or research?
- Are teachers selecting appropriately complex texts that reflect the needed balance of informational text and fiction?
- Are students receiving regular practice with and feedback on their writing?

**Math**
- Are teachers spending time on the right content?
- Are students getting regular practice with demanding tasks?
- Are teachers asking questions that assess and advance student understanding?

**Field Work**

ELA Field Work: Each committee member chose one exercise from artifact review and hosted a teacher focus group, student focus group and conducted observations.

1. **Artifact review:** (choose one)
   a. Collect 5 sample assignments in an ELA class and review the tasks closely to determine if they require citing evidence.
   b. Collect writing assignments across subject areas (ELA, science, ss and CTE) and examine the type of writing required.
   c. Collect three texts used in an ELA class and evaluate the complexity qualitatively and quantitatively – are these texts appropriately complex for the grade level?
   d. Collect one writing task and 5 pieces of graded student work. What are the areas of feedback?

2. **Teacher focus group:**
   a. How are you thinking about planning this year? What kinds of assignments have you been trying to provide students? What about your planning, if anything, has changed since last year?
   b. How have you selected texts this year? What about the approach to text selection, if anything, has changed? What steps do you go through in selecting a text?
   c. How are you grading writing this year? What kinds of things are you looking for in student work? Where are you focusing your feedback?

3. **Student questions**
   a. What are some of the main things you have been learning about this year? What are some of the things that your teacher is focused on teaching you? How do you know your teacher cares about these topics?
   b. What kinds of things do you read in class? Who selects what you read? What do you notice
about the things you are reading?

c. How often are you asked to write in English? Across other subjects? What are your personal strengths and weaknesses in writing? What feedback do you get on your writing?

d. Have you noticed anything different this year in English class than last year?

4. Teacher observation
   a. Observe 10+ minutes in at least 4 math classrooms and look for trends in:
      i. Evidence
      ii. Texts
      iii. Feedback

Math Field Work:
Math Field Work: Each committee member chose one exercise from artifact review and hosted a teacher focus group, student focus group and conducted observations.

1. Artifact review: (choose one)
   a. Review 2-3 long term plans or pacing guide for a teacher, school or district. Review for focus on focus standards.
   b. Review a collection of tasks that are being used in instruction for a single classroom. What do you notice?
   c. Script the questions asked in 10 minutes of observation for 2-3 different teachers.

2. Teacher focus group:
   a. Where have you spent time this year? How are students doing relative to this time last year? What are the biggest changes you are noticing? What are your biggest fears or concerns about where you are spending time?
   b. How have you been selecting tasks this year? What factors have you considered? What are you finding it harder and easier to find? What, if anything, has changed about how you are using tasks?
   c. How have you been thinking about questions in your planning? What types of questions are you asking? What types of questions are students responding to? How are you evaluating when to ask students and question and when to provide students information?

3. Student question:
   a. What kinds of problems are you doing in your math class? What kinds of problems are you good at? What kinds of problems are harder? What kind of problems do you like best? What kind of problems do you like least?
   b. What kinds of questions does your teacher ask you? What have you learned most about this year? What helped you learn that?
   c. Have you noticed anything different this year than last year in math?

4. Teacher Observation:
   a. Observe 10+ minutes in at least 4 math classrooms and look for trends in:
      i. Focus
      ii. Tasks
      iii. Questions
We convened for a 3 hour discussion, guided by the following questions:

**Discussion Guide:**

- Start with introductions with some background.
- Discuss goals and establish norms at the outset. Establish the expectations for the timing of the agenda but allow for some flexibility based on where the conversation trends.
- Ask everyone to go around and share striking impressions from field work.
- What is working? Where did people see evidence of progress?
- What is not working? Where did we see gaps against what we’d like to be seeing? (Don’t talk about next steps yet – just get the issues out on the table)
- What do we think is driving the progress? - Get really specific here. Why have we seen the progress that we have seen? What made that progress possible?
- What do we think is driving the gaps? (This is the most important question that will be discussed and it is important to get extremely specific. Why are these gaps present?)
- What are the most important gaps to address?
  - What are the lacking knowledge, skills and beliefs that are underneath the pressing gaps?
- How can we address these gaps?
- How can we best celebrate the progress?
- Synthesis at the end of the discussion: Allow each person to share an overall reaction from the day - what are you taking away from our discussion today? What is most exciting to you? What is most surprising?
Promoting Student Growth in Reading, Analyzing & Writing

Tennessee Department of Education
Common Core Leadership Course 202
Elementary School English Language Arts
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<td>Grades 4 - 5 Training Set Item</td>
</tr>
<tr>
<td>Scoring Students’ Work</td>
</tr>
<tr>
<td>Creating Text-Dependent Questions for Close Analytic Reading of Texts</td>
</tr>
<tr>
<td>Eleven Elements of Effective Adolescent Writing Instruction</td>
</tr>
<tr>
<td>Research Overview - Writing-to-Sources Essay</td>
</tr>
<tr>
<td>Reflections and Looking Ahead</td>
</tr>
</tbody>
</table>
Course Objectives

Participants will:

• Examine and discuss the common elements of college- and career-level writing
• Study and score student work
• Learn about current research on effective writing practices
• Experience & examine best practices to support student understanding and organization
College Paper Assignment

Writing to Discover
EN-1123: Essay 3

**Topic:** For this paper, you will select two pioneers in your chosen field—one foundational and one current. Then you will analyze the impact each has made on the field, taking into consideration when they entered the field and what was happening culturally at the time. Ultimately, this is a character analysis, but you are using an element of argument in your case for who is a pioneer.

**Assignment:** This assignment is in two parts. (A.) Research the pioneers. Remember that you are not just finding sources on your pioneers, but on cultural elements of the times as well. Some of the sources can agree with others and yourself, but not all of them; you may also need to find texts that disagree and differ from one another and, perhaps, with your argument. Each of your sources should be scholarly and not merely informational (an encyclopedia or Wikipedia are examples of informational sources). You will also want to be aware of the type of source you use; one of the goals of this assignment is that you learn how to consult authorities in your field and present yourself as an authority in conversation with them.

(B.) Analyze your pioneers and their places in the field. In order to do this, you should 1) present your pioneers, 2) discuss the work they’ve done and cultural implications/ramifications, 3) evaluate the pioneers’ effectiveness within the field, and 4) work toward an argument of your own (not necessarily in that order). You must find a way to present yourself as a reliable commentator on the field and the pioneers; this means you will need to be well informed on the topic (you should actually read your sources rather than just finding quotes that support your claim). Since you are creating an argument through your discussion of these texts, you will need to do more than merely summarize their points (though you may need to do some of that). Remember, you are partaking in a conversation with experts within your field.

For example, if my chosen discourse community is writing centers, I could choose Stephen North and Andrea Lunsford as my pioneers. North is foundational, and Lunsford is current. My research will find that North focused on presenting writing centers in a specific way—non-fix it shop—and Lunsford focuses on collaboration within centers, colleges, and universities. I would examine sources that not only agree with me, but also might agree with my pioneers. I would also examine some that disagree with my choice of North and Lunsford, or disagree with their claims (I wouldn’t just look in the writing center community; I could find information within Education and university structures.). From these sources, I will make the argument (thesis statement!) that perceptions of writing centers in American university culture influenced my pioneers’ perceptions and effects on the field itself.
Purpose: To improve your proficiency in the writing that you will do post-graduation and within your major coursework and to learn more about your chosen profession.

Audience: Your peers in this class and me.

Assessment: The final draft of this assignment will be evaluated on general levels: how effective your introduction is, how well you organize the entire essay and individual internal paragraphs, how well you use primary and secondary support (examples and details) to describe your specified topic and support your thesis, and how well the overall paper is edited for grammar, mechanics, and spelling. [Content-30%, Organization-30%, Vocabulary-20%, Grammar-10%, Mechanics-10%]

You will be given class time for workshops; please take them seriously.

Traps to Avoid:
- Failing to assert a clear and strong judgment
- Failing to support judgments with details and evidence
- Overusing first or second person (i.e. “I,” “me,” “my,” “we,” “us,” “our,” or “you”); this usually leads to issues with sentence variety
- Writing to a generic audience

Additional Information:
- Your annotated bibliography and paper must be in the style that is used in your field.
- Your paper must be at least 4 pages in length (not counting a resource page).
- The Writing Studio is here to help!
Finding Harmony within Opposition: Balancing the Methods

Of Allen Lane and Colin Robinson in the Modern World of Publishing

Behind every book cover lays a secondary story: the story of how the written work came to be bound. Publishing houses represent a complicated mediation between artistry and business, economics and passionate creation. Because of the dual nature of this business, the publisher’s story contains much conflict and criticism. While the majority in the book business believes that a publisher should primarily aim to bring in revenue and satisfy reader interest, the minority still cries out for artistic integrity. Many criticize publishers’ attempts to maximize profit by encouraging authors to adjust their work towards a ‘desirable’ and constrictive product. This debate between book marketability and integrity is stamped across the history of book publishing. Ultimately, the way a publisher approaches this eternal debate depends on the situational context of the era. Publishing thus represents an evolving field that caters to the needs of the time. Two men whose preferred publishing methods fall on opposite sides of the spectrum, Allen Lane of Penguin Books and Colin Robinson of OR Books, are publishing pioneers of their generation. Whether discovering means to mass-market paperback books for the price of a pack of cigarettes or courageously founding an independent publishing company that caters to an exclusive audience, these men have defined the futures of their craft.
Allen Lane, founder of Penguin Books, ingeniously pushed the reading world into a paperback frenzy, creating an era of literacy in which the written word was inexpensive, the projected audience of readers was expanded, and marketing was key to profit. At the time of his bold endeavor, those involved in the book business were aware of a deprived “reading public at the cheaper end of the market” (McCleery). However, no measures had been taken to reach this unaddressed audience since paperback books, a cost-effective solution, were “regarded at the time as ‘dirty rubbish’ by respectable publishers” (Cavendish). Lane’s environment thus differed greatly from the intellectual movement that defines our current era; the lay reading population was limited to intellectuals and those most passionate about learning from the written word.

Lane first sympathized with the unread folk upon discovering that the Exeter station bookstall had nothing of worth to read, leaving him without any means to while away his time on the train. A traumatic experience for book enthusiasts, this deprivation of readily available reading material led to an epiphany that would define the future of book sales: the need for widespread reproduction of paperback novels at a bare-minimum price. This risky business venture opposed common publication methods of the time. An innovator in his field, Lane’s mass-marketing approach placed him as the “center as an initiator of events” that transcends generations, directly affecting our interactions with literature today (McCleery). By catering to those less inclined to read, Lane’s venture may receive credit for starting a literature frenzy- a heightened sense of humanity’s capability to gain enjoyment and knowledge from reading- that leads individuals today to spend the afternoon idling away time beneath piles of paperbacks in the local bookstore.

With the support of his two younger brothers, Dick and John, Allen Lane’s vision of inexpensive, easily accessible paperback reprints led to the establishment of a new company:
Penguin Books. According to J.E. Morpurgo, the author of the biography *Allen Lane: King Penguin*, Lane established an “‘institution of national and international importance, like the *Times* or the *BBC*’” (Cavendish).
College and Career Readiness Anchor Standards for Writing

Text Types and Purposes
1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Production and Distribution of Writing
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Research to Build and Present Knowledge
7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Range of Writing
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Source: Common Core State Standards Initiative
http://www.corestandards.org/ELA-Literacy/CCRA/W
3rd Grade (Research Simulation Task)

You have read two texts about famous people in American history who solved a problem by working to make a change.

Write an article for your school newspaper describing how Eliza and Carver faced challenges to change something in America.

• In your article, be sure to describe in detail why some solutions they tried worked and others did not work.

• Tell how the challenges each one faced were the same and how they were different.

Notes:
6th Grade (Narrative Writing Task)

In the passage, the author developed a strong character named Miyax. Think about Miyax and the details the author used to create that character. The passage ends with Miyax waiting for the black wolf to look at her.

Write an original story to continue where the passage ended. In your story, be sure to use what you have learned about the character Miyax as you tell what happens to her next.
10th Grade (Literary Analysis Task)

Use what you have learned from reading “Daedalus and Icarus” by Ovid and “To a Friend Whose Work Has Come to Triumph” by Anne Sexton to write an essay that provides an analysis of how Sexton transforms “Daedalus and Icarus.”

As a starting point, you may want to consider what is emphasized, absent, or different in the two texts, but feel free to develop your own focus for analysis.

Develop your essay by providing textual evidence from both texts. Be sure to follow the conventions of standard English.

Notes:
<table>
<thead>
<tr>
<th>Score</th>
<th>Development</th>
<th>Focus &amp; Organization</th>
<th>Language</th>
<th>Conventions</th>
</tr>
</thead>
</table>
| 4     | In response to the task and the stimuli, the writing:  
• utilizes well-chosen, relevant, and sufficient evidence¹ from the stimuli to insightfully support the writer’s opinion.  
• thoroughly and accurately explains and elaborates on the evidence provided, connecting the evidence to the writer’s opinion and demonstrating a clear understanding of the topic and the stimuli. | In response to the task and the stimuli, the writing:  
• contains an effective and relevant introduction.  
• states and maintains a clear and sophisticated opinion or point of view.  
• utilizes effective organizational strategies to logically order reasons and information.  
• effectively establishes relationships among opinions, reasons, and evidence.  
• contains an effective and relevant concluding statement or section. | The writing:  
• illustrates consistent and sophisticated command of precise language and domain-specific vocabulary appropriate to the task.  
• illustrates sophisticated command of syntactic variety for meaning, reader interest, and style.  
• utilizes sophisticated and varied transitional words and phrases. | The writing:  
• demonstrates consistent and sophisticated command of grade-level conventions of standard written English.²  
• may contain a few minor errors that do not interfere with meaning. |
| 3     | In response to the task and the stimuli, the writing:  
• utilizes relevant and sufficient evidence¹ from the stimuli to adequately support the writer’s opinion.  
• adequately and accurately explains and elaborates on the evidence provided, connecting the evidence to the writer’s opinion and demonstrating a sufficient understanding of the topic and the stimuli. | In response to the task and the stimuli, the writing:  
• contains a relevant introduction.  
• states and maintains a clear opinion or point of view.  
• utilizes adequate organizational strategies to logically order reasons and information.  
• adequately establishes most relationships among opinions, reasons, and evidence.  
• contains a relevant concluding statement or section. | The writing:  
• illustrates consistent command of precise language and domain-specific vocabulary appropriate to the task.  
• illustrates consistent command of syntactic variety for meaning, reader interest, and style.  
• utilizes appropriate and varied transitional words and phrases. | The writing:  
• demonstrates consistent command of grade-level conventions of standard written English.²  
• contains some minor and/or major errors, but the errors do not significantly interfere with meaning. |
| 2     | In response to the task and the stimuli, the writing:  
• utilizes mostly relevant but insufficient evidence¹ from the stimuli to partially support the writer’s opinion. Some evidence may be inaccurate or repetitive.  
• explains some of the evidence provided, connecting some of the evidence to the writer’s opinion and demonstrating only a partial understanding of the topic and the stimuli. There may be some level of inaccuracy in the explanation. | In response to the task and the stimuli, the writing:  
• contains a limited introduction.  
• states a weak opinion or point of view.  
• demonstrates an attempt to use organizational strategies to order some reasons and information, but ideas may be hard to follow at times.  
• establishes some relationships among opinions, reasons, and evidence, but there are lapses in focus.  
• contains a limited concluding statement or section. | The writing:  
• illustrates inconsistent command of precise language and domain-specific vocabulary.  
• illustrates inconsistent command of syntactic variety.  
• utilizes basic or repetitive transitional words and phrases. | The writing:  
• demonstrates inconsistent command of grade-level conventions of standard written English.²  
• contains many errors that may significantly interfere with meaning. |
| 1     | In response to the task and the stimuli, the writing:  
• utilizes mostly irrelevant or no evidence¹ from the stimuli, or mostly/only personal knowledge to inadequately support the writer’s opinion. Evidence is inaccurate or repetitive.  
• inadequately or inaccurately explains the evidence provided; evidence and the writer’s opinion appear disconnected, demonstrating little understanding of the topic and the stimuli. | In response to the task and the stimuli, the writing:  
• contains no or an irrelevant introduction.  
• states an unclear opinion or point of view.  
• demonstrates an unclear organizational structure; ideas are hard to follow most of the time.  
• fails to establish relationships among opinions, reasons, and evidence; concepts are unclear and/or there is a lack of focus.  
• contains no or an irrelevant concluding statement or section. | The writing:  
• illustrates little to no use of precise language and domain-specific vocabulary.  
• illustrates little to no syntactic variety.  
• utilizes no or few transitional words and phrases. | The writing:  
• demonstrates limited command of grade-level conventions of standard written English.²  
• contains numerous and repeated errors that seriously impede meaning. |

¹ Evidence includes facts, concrete details, or other information as appropriate to the task and the stimuli.
² Conventions of standard written English include sentence structure, grammar, usage, spelling, capitalization, and punctuation.
Introduction:
In 2013, Tennessee realigned its writing assessment program to:

- assess the Common Core State Standards for English language arts,
- incorporate the three key instructional shifts of building knowledge through informational texts, reading complex texts, and responding with textual evidence, and
- help prepare teachers and students for the content and format of the PARCC assessments.

The February 2014 Tennessee Comprehensive Assessment Program Writing Assessment will emphasize the same shifts while attempting to approach more closely the format of the PARCC assessment, which will assess both reading and writing starting in the 2014-15 school year.

Key Results and Instructional Implications: The following table outlines the major trends from student results of the February 2013 TCAP Writing Assessment and provides examples of how teachers may choose to adjust their instruction. Please note these results are drawn from statewide data and may not be representative of students in your district or school.

<table>
<thead>
<tr>
<th>Key Results</th>
<th>Instructional Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, Conventions was the highest scoring trait, followed by Language/Style.</td>
<td>Since students generally experience more success with form (how students write, as measured by Language and Conventions), more emphasis could be placed on improving content (what students write, as measured by the Focus/Organization and Development traits). However, students still need practice in all traits.</td>
</tr>
<tr>
<td>Overall, students struggled the most in Support/Elaboration. Only 1.5 percent of 8th Graders and 0.3 percent of 11th Graders received a score of 4 (on a 1-4 scale) in Support/Elaboration.</td>
<td>Students appear to need more practice in the skill of writing to sources, including:</td>
</tr>
<tr>
<td>A large number of student responses (7,470) were too limited to evaluate and therefore unscorable. In most of these cases, students simply copied the text instead of writing an original essay.</td>
<td>- Selecting relevant and significant details and ideas from a text</td>
</tr>
<tr>
<td>A large number of student responses (7,470) were too limited to evaluate and therefore unscorable. In most of these cases, students simply copied the text instead of writing an original essay.</td>
<td>- Supporting claims and explanations with specific evidence from texts</td>
</tr>
<tr>
<td>Significant achievement gaps exist for students with disabilities, English language learners, and students who qualify for free- or reduced-priced lunch.</td>
<td>- Synthesizing textual evidence from multiple sources into a coherent explanation or argument</td>
</tr>
<tr>
<td>There may be many different issues at play for students with unscorable responses. Teachers may consider diagnosing and providing direct instruction in the following skill areas:</td>
<td>- Reading foundational skills and comprehension</td>
</tr>
<tr>
<td>There may be many different issues at play for students with unscorable responses. Teachers may consider diagnosing and providing direct instruction in the following skill areas:</td>
<td>- Structuring a paragraph that provides textual evidence</td>
</tr>
<tr>
<td>The same subgroups of students that tend to perform lower on TCAP exams also performed lower on the Writing Assessment. These students may need intervention and extra remediation in reading and writing.</td>
<td>- Practice with the format of online testing</td>
</tr>
</tbody>
</table>

1 For more detail, see the data appendix at the end of this memo.
Next steps to prepare students for the TCAP Writing Assessment and PARCC during the 2013-14 school year: The following next steps provide tips and potential instructional practices to help teachers prepare students:

1. Become familiar with the format of the 2013-14 TCAP Writing Assessment. This memo has further details. We will continue to update information on www.TNCore.org and through TNCORE Updates. Click here to sign-up for the TNCORE Update.

2. Review the score reports for your incoming students; analyze their strengths and weaknesses by trait and provide instruction in the common areas of deficit. Use the sample writing tasks the Tennessee Department of Education will release as extra practice for your students, and give them feedback using the revised rubrics. Sample writing tasks will be released as optional assessment resources in the fall and spring on www.TNCore.org.

3. Use the resources from module 5 in the 4-12 ELA Common Core summer training materials to create your own prompts for your students. Modules 2 and 5 also provide strategies for building student skill in comprehending complex texts and writing to sources. You can find summer training materials here.

4. Learn more about PARCC prose constructed responses by reviewing the sample items and draft rubrics.

5. Consider focusing writing instruction on the following key Common Core Writing Standards (note that Anchor Standards apply to all grades k-12).

<table>
<thead>
<tr>
<th>Anchor Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CCSS.ELA-Literacy.CCRA.W.1</strong></td>
<td>Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.</td>
</tr>
<tr>
<td><strong>CCSS.ELA-Literacy.CCRA.W.2</strong></td>
<td>Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.</td>
</tr>
<tr>
<td><strong>CCSS.ELA-Literacy.CCRA.W.4</strong></td>
<td>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</td>
</tr>
<tr>
<td><strong>CCSS.ELA-Literacy.CCRA.W.5</strong></td>
<td>Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</td>
</tr>
<tr>
<td><strong>CCSS.ELA-Literacy.CCRA.W.9</strong></td>
<td>Draw evidence from literary or informational texts to support analysis, reflection, and research.</td>
</tr>
<tr>
<td><strong>CCSS.ELA-Literacy.CCRA.W.10</strong></td>
<td>Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.</td>
</tr>
</tbody>
</table>
Data Appendix

Table 1: Scores by Trait (1-4 scale)

<table>
<thead>
<tr>
<th></th>
<th>Focus/Organization</th>
<th>Support/Elaboration</th>
<th>Language/Style</th>
<th>Conventions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>% scoring a 3 or 4</td>
<td>Average</td>
<td>% scoring a 3 or 4</td>
</tr>
<tr>
<td>5th grade</td>
<td>2.44</td>
<td>41.3%</td>
<td>2.46</td>
<td>42.0%</td>
</tr>
<tr>
<td>8th grade</td>
<td>2.46</td>
<td>45.5%</td>
<td>2.09</td>
<td>23.3%</td>
</tr>
<tr>
<td>11th grade</td>
<td>2.74</td>
<td>67.9%</td>
<td>2.02</td>
<td>27.6%</td>
</tr>
<tr>
<td>Overall</td>
<td>2.54</td>
<td>50.9%</td>
<td>2.20</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

Graph A: Trait progressions by grade

Note: this graph traces student performance on each trait across all three tested grades. Conventions and Language/Style remain the highest two traits and these scores go up slightly over three grades. Support/elaboration is the lowest scoring trait and scores drop from 5th to 11th grades.

Table 2:
Students Receiving Condition Code D: Too Limited to Evaluate (scored as a zero in all four traits)

<table>
<thead>
<tr>
<th></th>
<th>Overall number</th>
<th>Overall %</th>
<th>5th</th>
<th>8th</th>
<th>11th</th>
</tr>
</thead>
<tbody>
<tr>
<td>D: Too Limited to Evaluate</td>
<td>7,470</td>
<td>3.6%</td>
<td>2,661</td>
<td>4,596</td>
<td>213</td>
</tr>
</tbody>
</table>
Supporting Rigorous English Language Arts
Teaching and Learning

TCAP ELA Phase 1 Writing Task

Analysis

Please read “Stonehenge” by John Hudson Tiner.¹

You have now read two texts about Stonehenge. Write an opinion essay about which of the two authors best uses reasons and evidence to support ideas about the mystery of Stonehenge. Be sure to develop your point of view with reasons that are supported by facts and details from both texts. Follow the conventions of standard written English. Write your essay in the space provided on the next pages.

You may use this area for notes ONLY. Use the lined pages to write your essay.

Suppose you came upon a statue in the woods. “What is this?” you might ask.
Why is it here? Who brought it? Why? How did they get it here? What does it mean? These are reasonable questions. With a little research and some effort, you could probably find the answers and satisfy your curiosity.

Now, imagine coming upon something for which there are no answers—whose origins and reason for existence you could never know, no matter how much research you did.

Imagine Stonehenge, forever to be one of the world’s greatest mysteries.

**What We Do Know**

**The Age**
Stonehenge was built in phases from about 3100 B.C. to 1600 B.C. Yes, more than 5,000 years ago—during the Stone Age, long before the wheel was invented! We know this because scientists have used carbon dating\(^1\) to analyze the age of animal bones buried at the site.

**The Stones**
The monument consists of enormous stones laid out in concentric circles.\(^2\) The outermost circle is about 32 yards in diameter. The stones of the outer circle are sandstone columns connected by lintels\(^3\) about ten feet long. The lintels are shaped to the curve of the circle.

Even larger blocks of sandstone and lintels\(^3\) form an inner semicircle. The largest of these stones weighs about as much as a fully loaded cement truck—40 tons. Today, sandstone similar to the kind at Stonehenge is found about 19 miles north, but no closer.

Within the inner circle of pillars and lintels are smaller stones, called bluestones. Also arranged in a circle, some are still standing as they have been for thousands of years. Others are leaning or lying on the ground. These four-ton stones are from mountains nearly 250 miles away!

---

\(^1\) **carbon dating**: a way of calculating the age of a very old object by the amount of radioactive carbon

\(^2\) **concentric circles**: circles of different sizes with the same middle point

\(^3\) **lintels**: horizontal beams used for support

**The Placement**
29 A special stone called the Heel Stone stands at some distance from the main
30 structure. Imagine standing at the center of the structure and looking toward the
31 Heel Stone. If it were the morning of the summer or winter solstice, you would
32 see the sun rise directly over the Heel Stone.

33 That’s what we know about the structure. Here’s some of what we don’t know. . .

35 How were the stones transported?
36 How were they stood on end?
37 How were the lintels put in place?

38 Is it mere coincidence that the sun rises and sets over the Heel Stone on the
39 summer and winter solstice, or was the placement of the stone chosen for that
40 very purpose?

41 Answers to these questions represent a combination of theory and imagination.

43 What We Think

44 Transportation
45 Most archaeologists maintain that people transported the stones, even the
46 bluestones that came from so far away. According to these specialists, the
47 stones were dragged over land and perhaps towed along the shoreline to their
48 destination.

49 In 2000, a group of Welsh and English volunteers participated in a reenactment
50 of the process by moving a three-ton bluestone from the Preseli Mountains in
51 Wales to Stonehenge. The volunteers used methods and boats they thought
52 might have been available 5,000 years ago.

53 To travel along the coast, the stone was towed by two boats lashed together. At
54 a point along the way, one of the ropes snapped, and the stone sank. It took
55 many divers and a lot of muscle power to hoist the stone back into position.

---

4 solstice: the longest (summer) or shortest (winter) day of the year
5 mere: no more than
6 hoist: raise or lift up
56 Imagine what it might have taken to house, clothe, and feed all the people
needed to transport these stones! Would it have been possible? No one knows for sure.

Many geologists contend that ancient glaciers deposited the massive boulders across the plains of southern England. These would have been gathered by the Stone Age monument-makers and transported to the site. It would have been a big job but not as big as transporting the stones nearly 250 miles.

Today, the immediate area around the monument is free of large boulders. However, supporters of this viewpoint point to the many glacial remnants within a 60-mile radius to suggest that glaciers were no strangers to the area. Perhaps farmers had already removed most of the large stones.

**Construction**

What happened once the stones were at the site? How were they raised upright? And how were the lentils jacked into position? Barbara J. Becker, a historian of science, proposes the following:

(Image Credit: Her Majesty’s Stationary Office, 1978)

However, like almost everything else about Stonehenge, we have no way of knowing for sure that this is what happened.

---

7 remnant: a small part of something that remains after most is gone
8 to jack: to raise a heavy object a short distance using a mechanical device
What We Imagine

Whatever your view about how Stonehenge was built, a single question remains:
Why? Like much else about this mysterious monument, theories abound.⁹

Some believe the monument was an astronomical calendar. According to this group, the placement of the stones predicted solar eclipses and marked the summer and winter solstices. But would Stone Age people have had the knowledge to erect such a monument?

Others contend that Stonehenge was a place of healing, a place where some type of primitive surgery was performed. As evidence, people of this view cite the nearby discovery of skeletons with crude gashes. . . . But the gashes could have had many origins.

Still others feel that Stonehenge was a burial ground and site for ancestor worship. Skeletal remains dating from 3000 B.C. to 2500 B.C. are offered as evidence for this theory. But why here?

Research scientists and others continue to explore Stonehenge and its many mysteries. For now, only two things are certain:

The sun will rise over the Heel Stone to mark the next solstice.
Our understanding of Stonehenge will remain incomplete.

What do you think?

---

⁹ abound: be present in large numbers
¹⁰ erect: construct
¹¹ primitive: simple, in the early stages of development


Grade 4-5/Text 1

This material is copyrighted and therefore must be securely destroyed immediately after use. DO NOT provide a copy of this material to anyone (teacher, student, or otherwise) who is not directly involved with this test administration.
The Stonehenge people possessed an incredible blending of organization, intelligence, and building skill.

On the Salisbury Plain in England stands Stonehenge, a magnificent circle of stone arches. During the past four hundred years, visitors have tried to reason out its purpose.

Stonehenge at first looks like a confusing series of nested stone circles. Gigantic standing stones circle two horseshoe-shaped sets of blocks eighteen feet high. In the center is a massive sandstone table called the Altar. Despite the name, no one knows the actual use of the Altar. Beyond it is a large tapering stone known as the Heelstone.

The flat Altar stone convinced scholars of the 1500s that the monument served as a temple. They imagined that people gathered around it and prepared to go to war. Scholars had a few real facts about the site. They did know that on the first day of summer, the sun rose directly over the Heelstone as seen from the Altar. Most scientists thought this to be only a coincidence.

In 1620, Inigo Jones made the first accurate drawings of the monument. He was an experienced building designer, and he decided it couldn't be the work of ancient Britons. “These savage and barbarous people could not possibly erect such a stately structure,” he said. He concluded it was the ruins of a Roman temple, put in place about A.D. 100.

The Romans invaded England about A.D. 43. They built many permanent structures that still stand. However, Stonehenge was ancient even then. The Romans had not built it.

In 1650, John Aubrey explored the site. He visited interesting places and described them in books that he wrote. Aubrey discovered the remains of a circular trench 320 feet in diameter and five feet deep around Stonehenge. Just inside the trench, Aubrey found 56 evenly spaced pits filled with white chalk. He declared that the Druids, a mysterious group of Britons who lived about 200 B.C., used Stonehenge as a temple. For two hundred years, people accepted Aubrey’s explanation.

---

1 taper: gradually become narrower at one end
2 barbarous: uncivilized
trench: a long, deep hole in the ground with steep sides

In 1880, Professor William Gowland, a geology professor, dug around one of the towering stones of the larger circle. He found flint and sandstone axes and hammers that had been used in its construction. The ancient tools came from a time before the Druids. Stonehenge had to be more than a thousand years old when the Druids came on the scene.

Archaeologists today believe ancient people began construction about 3500 B.C. The first version consisted of the circle of 56 holes that Aubrey discovered. About 2300 B.C., ancient people transported gigantic stone blocks to the site. They completed the last improvement about 1000 B.C. After that, it fell into ruins.

A thousand years passed. The Romans invaded England. They carted away some of the stones for building material. The Romans left in A.D. 410. Wind and rain wore away at the stone for the next thousand years. Visitors hammered off chips for souvenirs.

In 1958, England had the fallen stones raised. They restored Stonehenge to how it appeared in Roman times. Later, they rerouted modern highways away from the site and built an underground visitors’ center. Despite the years of neglect, it remains an awe-inspiring accomplishment.

Why did the ancient people of England invest so much time and effort in the monument? Archaeologists have made many attempts to provide an answer. They found evidence that could mark celestial events during the course of a year.

Early in the 1900s, the English astronomer Norman Lockyer showed that the sun rose over a particular stone on the first day of summer. Other astronomers were impressed with the 56 Aubrey holes. Eclipses of the sun and moon repeat in a cycle that lasts 56 years. By moving stones around the Aubrey holes, the ancient people could have computed the dates of solar and lunar eclipses.

Because of the importance of the sun in daily life, an eclipse of the sun could be a frightening event. Being able to predict an eclipse took away some of the fear.

In 1964, Gerald H. Hawkins of Boston University became convinced the arrangement of stones was not a coincidence. If the people had wished to mark only summer sunrise, they needed only two stones: one stone to mark where they should stand and another one farther away to show on the horizon where

---

4 flint: a hard quartz rock used for tools in prehistoric times
5 reroute: send in a different direction
6 celestial event: anything of interest that happens in outer space involving planets, stars, etc.
7 eclipse: the hiding of an object in space, like the sun or moon, by another object that crosses in front of it
8 lunar: having to do with the moon
the sun would come up. Yet, the Stonehenge builders carved hundreds of stones that weighed thousands of tons and placed them in position.

Hawkins took detailed measurements from aerial photographs of the stones. He fed the information into a computer. Hawkins concluded that Stonehenge was an elaborate astronomical observatory. The Stonehenge builders could calculate solstices (first day of summer and winter), equinoxes (first day of spring and autumn), and eclipses.

At first, scientists dismissed such an idea. Ancient people, they believed, simply would be too primitive to make such precise calculations. Hawkins convinced many skeptics with his discovery that an eclipse of the sun or moon always occurred when the winter moon rose over the Heelstone.

Other archaeologists believe that Gerald Hawkins overstated the purpose of Stonehenge. They believe its true purpose has yet to be fully revealed. The Stonehenge people, like many others of the remote past, showed remarkable skill. They possessed an incredible blending of organization, intelligence, and building skill. Stonehenge builders searched for truth and knowledge. To what extent they achieved their goals we do not know. But they saw a design in creation that modern people often ignore.


Grade 4-5/Text 2

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Reflecting on Student Work: Low, Medium, and High

Directions: After you’ve read your students’ work, sort the essays into one of three piles: Low, Medium, and High. Then complete the questions below.

How many essays did you place in each pile?

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
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</table>

What are the strengths of your students’ papers? List 2-3.

What are the weaknesses of your students’ papers? List 2-3.

Interact with two people you haven’t met yet and give/share an answer to this question: What would you and your teachers need to do to get all of your students into the “high” pile?
Training Set Directions

After you have read and reviewed the texts, anchor responses and annotations for this item, you may complete this training set.

This item-specific training set was developed to help you practice scoring responses before you begin to score your students’ work. Unlike the individual trait anchors, you will review these responses for all four traits. Responses within the training set have also been placed in random order, unlike anchor responses.

There are five responses in the training set. After reading each response, write down your score for all four traits (Development, Focus & Organization, Language, and Conventions). There is space available after each response for you to provide a score. Once you have finished scoring, you may go on to the next response and repeat this process.

You are highly encouraged to use the anchor responses and appropriate rubrics for this item as you move through the training set and score responses. Keep in mind that your copies of the texts may also help in assessing these training responses.

An answer key has been provided on the last page of this training set. Once you have finished scoring the training set, you may compare your score with the true score for each response.
Training Set: Response #1

In my opinion, I think John Hudson Tiner used the best evidence and reason that Stonehenge is still a mystery.

John Hudson Tiner wrote that Inigo Jones, John Aubrey, Proffesor Williams Gowald, Norman Lockyer, and Gerald H. Hawkins all try to reveal all the mysteries of the Stonehenge. In the passage, “Inigo Jones made the first accurate drawings of the monument.” For John Aubrey, “Aubrey discovered the remains of a circular trench 320 ft in diameter and five feet deep around the Stonehenge.” For Proffesor Williams Gowald, “A geology proffesor, dug around one of the towering stones of the large circle. He found flint and sandstone axes and hammers used in construction.”

So after every discovery, John Hudson Tiner put the proffesor’s name and some details that the proffesor discovered about Stonehenge.

In Majorie Frank’s story, it only tells the facts with no explanation at how, when, or what reason they digged the flint. For example, “The outermost circle is about 32 yards in diameter.” It tells that fact, but there were no details in how they found it or what reason they found it.

Anoter reason I didn’t choose Majore Frank’s theory is, because they really haven’t suggest when or what cooperated in the construction.

In the theory of John Hudson Tiner, it said it was probably in 3500 B.C. In the paragraph He said, “About 2800 B.C., ancient people transported gigantic stones blocks to the site. They completed the last improvement about 1000 B.C.”

Those are some of the reasons why I choosed John Hudson Tiner instead of Marjore Frank. I think having more professors involved in the story will probably reveal more reasons why they built or how they built Stonehenge.

Scores
Development:
Focus & Organization:
Training Set: Response #2

I think that Jhon hudson tiner did better by giving good evidence about the passage and better detailed it, also takes much more about it and it stays on topic like talking about salonary plain, which is very much so, staying on topic, but the other one doesn’t stay on topic. I also like how it talks about the romans invaded england, it goes back all the way to the 1620’s when inigo Jones made the first accurate drawings of the monument served as a temple, then monument was served as a temple and roman temples were their too, back then in the old day.

Scores
Development:
Focus & Organization:
Training Set: Response #3

Writers John Hudson Tiner and Marjorie Frank both wrote papers with the title “Stonehenge”. Although their subject matter was the same their content varied greatly. Based on these two articles, I believe John Hudson Tiner wrote a more informative article.

Frank’s paper is interesting but Tiner’s provides the reader with more information. Tiner gives a more complete description of the layout of stonehedge. He talks about the history of our knowledge about the structure, as well as the people who proposed some of the popular theories about its origin and purpose. For example, He explained how Inigo Jones made the first accurate drawings of Stonehenge and thought that the romans had built Stonehenge. Frank does not mention the early theory about the romans. She only says that Stone Age people built the structure.

He also provides more details about Stonehedges astronomical significance. Frank does mention the Heelstone and its alignment to the rising sun on the summer solstice but she leaves out information about the Aubrey holes and their connection to lunar and solar eclipses. Tiner gives a lot of information about the Aubrey holes. He explains how, by moving stones around the 56 Aubrey holes, you can predict eclipses because eclipses of the sun and moon repeat in a cycle that lasts 56 years.

Although both writers have clearly studied the structure of Stonehenge, John Hudson Tiner provides more complete information. In my opinion Tiner’s article was better.

Scores
Development: 
Focus & Organization:
Training Set: Response #4

I think John Tiner’s Stonehenge was better than Marjorie Frank’s. John Tiner explained more on the stones, as Marjorie Frank just touched on it. Marjorie Frank explained just a bit about everything. She asked more questions, as Tiner answered them. I think Marjorie Frank explained more about how and less about the actual stones. Tiner explained several of the theories about the stones, as Marjorie explained only one. In conclusion, my personal opinion is that John Tiner’s “Stonehenge” was more in depth, and better than Marjorie Frank’s.

Scores
Development:
Focus & Organization:
Training Set: Response #5

There were two very interesting articles written about Stonehenge. One was by Marjorie Frank and the other was by John Hudson Tiner. Although Marjorie Frank’s article contains factual information regarding Stonehenge, John Tiner’s article did a better job of explaining the mystery that surrounds Stonehenge and includes more details about certain aspects of Stonehenge, especially its use as an astronomical calendar. After reading Tiner’s article, the reader not only knows details about Stonehenge, but understands the different theories about Stonehenge’s creation and how it is still a mystery to this day. In my opinion, Tiner wrote the better article.

One of the biggest differences in the two articles is how Tiner takes the reader through the history of theories that have tried to explain Stonehenge. To begin with, Tiner describes how Inigo Jones made the first accurate drawings of Stonehenge. Jones determined that the structure couldn’t possibly be the work of ancient Britons because it was to impressive of an accomplishment to be built by a “savage and barbarous” people. Jones surmised that the Romans must have built Stonehenge. That theory was proven incorrect because Stonehenge was old even at the time of the Romans. Later, in 1620, John Aubrey puts forth the theory that the Druids, a mysterious group of ancient Britons, erected Stonehenge. His theory was accepted for two hundred years until Professor Willaim Gowland came along. Once again, a theory about who built Stonehenge was about to be undone. Professor Gowland discovered tools that had been used in the construction of Stonehenge and they were from a time well before the Druids. As you can see, Tiner does an excellent job showing how theories about Stonehenge have come and gone over the years. This reinforces the idea that the truth about Stonehenge is still a mystery. Marjorie Frank does not discuss the historical progression of theories about Stonehenge at all. She simply states that Stone Age people built it.

Another topic that Tiner addresses better than Frank is Stonehenges use as an astronomical calendar. Although Frank does state that the sun rises over the Heelstone on the summer and winter solstices, and that Stonehenge might have been used to predict solar eclipses, Tiner goes into much more detail. For instance, Tiner discusses the 56 Aubrey Holes, which frank does not mention. Tiner tells us that the Aubrey holes could be used to predict eclipses because sun and moon eclipses repeat in a cycle that lasts 56 years. By moving stones around the Aubrey holes, ancient people could have computed the dates of solar and lunar eclipses. By giving more detail about how Stonehenge could have been used to predict astronomical events, Tiner heightens the mystery about who these ancient but intelligent people might have been.

(Continued on next page)
Although both articles contain interesting details about Stonehenge, John Tiner wrote the better article. Marjorie Frank and John Tiner both give many facts, but Tiner gives more details about its use as an astronomical calendar and discusses different theories that have come and gone over the years. Tiner gives the reader an understanding of the long, winding road of history that always seems to lead to more mystery about Stonehenge.

**Scores**

**Development:**

**Focus & Organization:**
Training Set Key

Training Set: Response #1:
Development: 2
Focus and Organization: 2
Language: 3
Conventions: 2

Training Set: Response #2:
Development: 1
Focus and Organization: 1
Language: 1
Conventions: 1

Training Set: Response #3:
Development: 3
Focus and Organization: 3
Language: 3
Conventions: 3

Training Set: Response #4:
Development: 1
Focus and Organization: 2
Language: 2
Conventions: 3

Training Set: Response #5:
Development: 4
Focus and Organization: 4
Language: 4
Conventions: 4
Scoring Students’ Work

Directions:
1) Pick one essay from each of your “Low,” “Medium,” and “High” piles.
2) Label each with an L, M, or H on top for easy reference
3) Find a partner and swap your pile of three papers
4) Score your partner’s papers using the rubric and anchor papers.
5) Fill in the scores in the table below and calculate the trait averages.
6) When you and your partner are finished, exchange papers and this score sheet. Discuss your findings with each other:
   • Did anything surprise you about the scores?
   • Do you disagree on any of the score points?
   • Based on the average scores, what is the greatest area of need for your students? Does this correspond with the areas of need you identified earlier when reflecting on student work?

<table>
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<th>Trait</th>
<th>Low</th>
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<tbody>
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<tr>
<td>Focus and Organization</td>
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</tbody>
</table>

Average Development Score:

Average Focus and Organization Score:
Creating Text-Dependent Questions for Close Analytic Reading of Texts

An effective set of text-dependent questions delves systematically into a text to guide students toward extracting the key meanings or ideas found there. Text-dependent questions typically begin by exploring specific words, details, and arguments, and then move on to examine the impact of those specifics on the text as a whole. Along the way, they target academic vocabulary and specific sentence structures as critical focus points for gaining comprehension.

While there is no set process for generating a complete and coherent body of text-dependent questions for a text, the following process is a good guide that can serve to generate a core series of questions for close reading of any given text.

**Step One: Identify the Core Understandings and Key Ideas of the Text**

As in any good reverse engineering or “backwards design” process, teachers should start by reading and annotating the text, identifying the key insights they want students to understand from the text. Keeping one eye on the major points being made is crucial for fashioning an overarching set of successful questions and critical for creating an appropriate culminating assignment.

**Step Two: Start Small to Build Confidence**

The opening questions should be ones that help orient students to the text. They should also be specific enough so that students gain confidence to tackle more difficult questions later on.

**Step Three: Target Vocabulary and Text Structure**

Locate key text structures and the most powerful words in the text that are connected to the key ideas and understandings, and craft questions that draw students’ attention to these specifics so they can become aware of these connections. Vocabulary selected for focus should be academic words (“Tier Two”) that are abstract and likely to be encountered in future reading and studies.

**Step Four: Tackle Tough Sections Head-on**

Find the sections of the text that will present the greatest difficulty and craft questions that support students in mastering these sections (these could be sections with difficult syntax, particularly dense information, and tricky transitions or places that offer a variety of possible inferences).

**Step Five: Create Coherent Sequences of Text-dependent Questions**

Text-dependent questions should follow a coherent sequence to ensure that students stay focused on the text, so that they come to a gradual understanding of its meaning.

**Step Six: Identify the Standards That Are Being Addressed**

Take stock of what standards are being addressed in the series of questions and decide if any other standards are suited to being a focus for this text (forming additional questions that exercise those standards).

**Step Seven: Create the Culminating Assessment**

Develop a culminating activity around the key ideas or understandings identified earlier that (a) reflects mastery of one or more of the standards (b) involves writing, and (c) is structured to be completed by students independently.
Eleven Elements of Effective Adolescent Writing Instruction

This report identifies 11 elements of current writing instruction found to be effective for helping adolescent students learn to write well and to use writing as a tool for learning. It is important to note that all of the elements are supported by rigorous research, but that even when used together, they do not constitute a full writing curriculum.

1. Writing Strategies, which involves teaching students strategies for planning, revising, and editing their compositions

2. Summarization, which involves explicitly and systematically teaching students how to summarize texts

3. Collaborative Writing, which uses instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions

4. Specific Product Goals, which assigns students specific, reachable goals for the writing they are to complete

5. Word Processing, which uses computers and word processors as instructional supports for writing assignments

6. Sentence Combining, which involves teaching students to construct more complex, sophisticated sentences

7. Prewriting, which engages students in activities designed to help them generate or organize ideas for their composition

8. Inquiry Activities, which engages students in analyzing immediate, concrete data to help them develop ideas and content for a particular writing task

9. Process Writing Approach, which interweaves a number of writing instructional activities in a workshop environment that stresses extended writing opportunities, writing for authentic audiences, personalized instruction, and cycles of writing

10. Study of Models, which provides students with opportunities to read, analyze, and emulate models of good writing

11. Writing for Content Learning, which uses writing as a tool for learning content material

Key Steps

1. **Prepare:**
   a.) Analyze the prompt to pose or clarify a question about text(s)
   b.) Gather and analyze textual evidence
   c.) Create a thesis. Test it: does it answer the question? Is it supported by evidence?
   d.) Create an outline

2. **Draft:** Put your ideas into sentences and paragraphs. Explain and support your ideas.

3. **Revise:** Consider your reader’s needs and expectations. Have you successfully communicated/argued your point?

4. **Edit:** Correct errors in conventions; ensure correct citation

5. **Publish**

*Based on* [http://writing.mit.edu/wcc/resources/writers/writingprocess]
Gather and analyze textual evidence through graphic organizers

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Text One</th>
<th>Text Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is purpose conveyed?</td>
<td></td>
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</tbody>
</table>
Reflections and Looking Ahead

1. What are 1-2 take-aways that you have from this Literacy module?

2. What are you going to do between now and Class 2 to support your students in writing?

3. Based on what you learned today, what are you going to share with your teachers?
Promoting Student Growth in Challenging Math Content

Tennessee Department of Education
Common Core Leadership Course 202
Elementary School Mathematics
Grades K - 5
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<td>Reflections and Looking Ahead</td>
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Course Objectives
Participants will:

- Consider the expectations of CCSS tasks for students;
- Examine what we presently know about student understanding statewide and in our buildings;
- Deepen content knowledge in a targeted skill deficit;
- Prepare to support teachers in their work to improve student outcomes.

Class One Agenda
Participants will:

- Review state-wide data from last year’s CRA;
- Complete an assessment task on areas that presented students the greatest challenge;
- Focus on content and key understandings in grade 3;
- Analyze student work from bridge to practice;
- Plan a conversation to have with a teacher about trends in student work and next steps.
Statewide Constructed Response Data, 2012

Elementary Band

Grade 3 CRA Summary

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<thead>
<tr>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
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<td>Party Treats Task</td>
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Grade 4 CRA Summary

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Grade 5 CRA Summary

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Statewide Constructed Response Data, 2012

Review and Reflection Questions
(Small Group Discussion)

Where did students do well? Where did they struggle? Consider both content and practice standards.

Extension Question

How might these results impact the work of K-2 teachers?
Grade 3 Summative CRA Findings and Implications

<table>
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<td>MP7</td>
<td>4.7</td>
</tr>
<tr>
<td>3.OA.A.3</td>
<td>58.4</td>
<td>MP3</td>
<td>22.2</td>
</tr>
<tr>
<td>MP1</td>
<td>7.8</td>
<td>MP4</td>
<td>63.0</td>
</tr>
</tbody>
</table>

"The number to the right of the standard is the percentage of students receiving all possible points for that standard for the particular task. Typically, each standard for each task was worth one point, but in some instances it was worth two points."

Content Results:
In grade 3, the strongest content scores were in task 3 on standard 3.OA.A. This standard asks students to solve word problems using multiplication and division. The lowest scores were in tasks 1 and 4 on standard 3.OA.B.5. These tasks ask students to make use of the distributive property.

Practice Results:
In grade 3, the strongest practices scores were in task 1 and task 4 on MP3 and MP4. These practices ask students to explain the relationship between factors and products and represent thinking through equations or diagrams. The lowest scores were in task 2 on MP7. This practice asks students to look for and make use of structure. In this task, students needed to use structure to explain that any number divisible by 3 and 4 is also divisible by 2 because 2 is a factor of 4.

The following is intended to help illustrate the content standard 3.OA.B.5:

3.OA.B.5 Apply properties of operations as strategies to multiply and divide.
- If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.)
- $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.)
- Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)

In grade 2, students learned to partition a rectangle into rows and columns of same-size squares and count to find the total number. This is a major concept within measurement, and area models function as a support to understand multiplication in grade 3 and beyond.
Decomposing the number of groups or items in a group

In the above diagram, there is a 5 x 11 rectangle partitioned into two smaller rectangles, one blue and one red. The number of groups (11) has been decomposed into two smaller groups (4 and 7), with 5 squares in each group. The smaller rectangle has an area that is 5 x 4 or 20 squares. The larger rectangle has an area that is 5 x 7 or 35 squares. Notice how each step in the equation represents what is happening in the diagram:

\[
11 \times 5 = (4 + 7)5 = (4 \times 5) + (7 \times 5) = 20 + 35 = 55
\]

Because either the number of groups or the number of items in each group can be decomposed (or both), we can think about the number in each group differently. In this model, considering 11 groups of 5 squares, the difference is that number of squares in each group has been decomposed into groups of 2 and 3. The equation represents partitioning the number of squares in each group (5). The groups are smaller in size, but the product (55) remains the same.

\[
11 \times 5 = 11(2 + 3) = (11 \times 2) + (11 \times 3) = 22 + 33 = 55
\]

**Essential Understanding**

The essential understanding is that when you have a specific number of groups and a specific number of items in each group, you can decompose and distribute the number of groups or items in the group to make more groups that are smaller in size, but the product remains the same.
**Examples of Using the Distributive Property:**
Students can use the distributive property to decompose factors to find unfamiliar products or solve comparison problems. Below are some examples of how to make use of the distributive property:

- **What is 9 x 17?** By decomposing the 17 into 10 and 7, students can use the distributive property to see that $9 \times 17 = 9(10 + 7) = (9 \times 10) + (9 \times 7) = 90 + 63 = 153$.

- **One box of cookies has 24 cookies in each box. If one person has 5 boxes of cookies and another person has 3 boxes, how many more does the person with 5 boxes have?**
  
  $(24 \times 5) - (24 \times 3) = 24(5 - 3) = 24 \times 2 = 48$

- **Which is greater, 25 x 36 or 35 x 26?**
  
  $25 \times 36 = 25(35 + 1) = 25 \times 35 + 25$
  
  $35 \times 26 = 35(25 + 1) = 35 \times 25 + 35$
  
  Using the distributive property, it becomes easy to see that 35 groups of 26 will be greater than 25 groups of 36 by 10.

**Helpful Resources**

- **Instructional Tasks on** [www.TNCore.org](http://www.TNCore.org):
  - Field Trip
  - Lunch Money
  - Birthday Party
  - Tiles for the Teacher
- **Phase I CRA tasks from 2012-2013 on** [www.TNCore.org](http://www.TNCore.org):
  - Helping Amber
  - How Many More?
- **Task Analysis Guide on** [www.TNCore.org](http://www.TNCore.org)
- **PARCC Model Content Frameworks on** [www.parcconline.org](http://www.parcconline.org)
- **Learning Progressions on** [www.turnonccmath.net](http://www.turnonccmath.net)
A Plan for the 3rd Grade Professional Learning Community

<table>
<thead>
<tr>
<th>Step One:</th>
<th>Access your teacher or grade level data from the Measurement Inc. portal at <a href="https://state2.measinc.com/WP/SignIn.aspx">https://state2.measinc.com/WP/SignIn.aspx</a>. (Note: you may need to get login information from your school testing coordinator or principal.)</th>
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<td>Review data across your grade level: Look for strengths and weaknesses across content and practice standards. What trends do you notice? (For example, our students were strong in task 2 on 3.OA.A.4 and weak in 3.OA.B.5 in task 4; our students were strong in MP3 in task 1 and weakest in MP7 in task 3.) Look for particular tasks that had strong or low overall scores. (For example, our students scored strongest on task 1 and lowest on task 4.)</td>
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</tr>
</tbody>
</table>
Grade 4 Summative CRA Findings and Implications

<table>
<thead>
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<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Task 4</th>
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</thead>
<tbody>
<tr>
<td>Orange Juice Task</td>
<td>Ms. Hill’s Homework Task</td>
<td>Library Books Task</td>
<td>Bill’s Claim Task</td>
</tr>
<tr>
<td>4.NF.B.3a</td>
<td>46.6</td>
<td>4.NF.B.4c</td>
<td>4.NF.B.4b</td>
</tr>
<tr>
<td>4.NF.B.3d</td>
<td>25.2</td>
<td>MP4</td>
<td>MP3</td>
</tr>
<tr>
<td>MP1</td>
<td>10.6</td>
<td>MP6</td>
<td>MP6</td>
</tr>
<tr>
<td>MP4</td>
<td>12.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"The number to the right of the standard is the percentage of students receiving all possible points for that standard for the particular task. Typically, each standard for each task was worth one point, but in some instances it was worth two points."

Content Results:
Looking across the data for content from grade 4, the strongest scores were on standard 4.NF.B.3 in task 2, understand a fraction with a/b with a>1 as a sum of fractions 1/b. The lowest scores were on standard 4.NF.B.4b on task 4, understand the multiple of a/b as a multiple of 1/b and use this understanding to multiply a fraction by the whole number.

Practice Results:
The lowest rate of success on the practices was MP1, make sense of problems and persevere in solving them, on task 1. In this task, a student would receive credit for MP1 by indicating a correct solution path using any operation and relating an appropriate subtraction equation to their diagram. Additionally, MP4 was noted as having a low rate of student success on tasks 1, 2, and 3. MP4, Model with mathematics is represented on all tasks by requiring the students to connect a diagram to an appropriate expression/equation.

The following is intended to help illustrate the content standard 4.NF.B.4:

4.NF.B.4b Understand the multiple of a/b as a multiple of 1/b and use this understanding to multiply a fraction by the whole number.
Examples:
- 3 x (2/4) is the same as (3 x 2)/4 or 3 x (2 x 1/4) = 6 x 1/4
- Visual model:
In this model, 6 is represented by the 6 squares, each square is divided into fourths, as determined by the denominator of the fraction. ¼ of each square is shaded in, representing 6 x ¼. The students could ultimately get to an understanding of a general rule that \( n \times \left( \frac{a}{b} \right) = \left( n \times \frac{a}{b} \right) \). In the context of this equation, \( \left( 3 \times 2 \right)/4 \) as modeled by:

![Diagram of squares with shaded parts]

In grade 3, students learned **3.NF.A.1** Understand a fraction \( \frac{1}{b} \) as the quantity formed by 1 part when a whole is partitioned into \( b \) equal parts; understand a fraction \( \frac{a}{b} \) as the quantity formed by \( a \) parts of \( \frac{1}{b} \). The PARCC Model Content Frameworks indicate fraction equivalence as an important theme within the standards that begins in grade 3. In grade 4, students extend their understanding of fraction equivalence to the general case, \( \frac{a}{b} = \left( \frac{n \times a}{n \times b} \right) \) (3.NF.A.3 \( \rightarrow \) 4.NF.A.1).[3] They apply this understanding to compare fractions in the general case (3.NF.A.3d \( \rightarrow \) 4.NF.A.2).

**Essential Understandings**

- When decomposing a fraction into iterations of the unit fraction, the number of iterations is the same as the value of the numerator.
- Iterating a unit fraction is an interpretation of a fraction that illustrates the equal parts that the fraction is composed of \( \left( \frac{\frac{1}{5}}{\frac{1}{5}} + \frac{\frac{1}{5}}{\frac{1}{5}} + \frac{\frac{1}{5}}{\frac{1}{5}} = 3 \times \frac{1}{5} = \frac{3}{5} \right) \).

**Helpful Resources**

- Instructional Tasks on [www.TNCore.org](http://www.TNCore.org):
  - Treat Bag
  - We All Scream for Ice Cream
  - Cookies
  - Celebrate!
- Phase II CRA task and scoring guide from 2012-2013 on [www.TNCore.org](http://www.TNCore.org):
  - Portion of a Whole
- Task Analysis Guide on [www.TNCore.org](http://www.TNCore.org)
- PARCC Model Content Frameworks on [www.parcconline.org](http://www.parcconline.org)
- Learning Progressions on [www.turnonccmath.net](http://www.turnonccmath.net)
### A Plan for the 4th Grade Professional Learning Community

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
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Look for particular tasks that had strong or low overall scores. (For example, our students scored strongest on task 1 and lowest on task 4.) |
| **Step Four:** | In light of the data and the tasks, identify specific points where your students most likely experienced difficulty. Things to consider might be:  
- How is the task presented to students in terms of language, graphs, diagrams, tables?  
- How are students expected to respond to the task, (i.e. through words, diagrams, equations)?  
- In what ways were the students to make use of the practice standards in this task? |
| **Step Five:** | Build a series of lessons with high level tasks in an upcoming unit and collect student work from at least three students that are in different places in their learning. After the unit, analyze the student work for understanding of these students. Consider how to use understandings from previous grades to build understanding. The curricular resources page on TNCore.org offers instructional tasks and task arcs by grade level that may be helpful to you in writing a unit plan: [http://tncore.org/math/curricular_resources.aspx](http://tncore.org/math/curricular_resources.aspx). |
### Grade 5 Summative CRA Findings and Implications

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<thead>
<tr>
<th>Task 1</th>
<th>Task 2</th>
<th>Task 3</th>
<th>Task 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplying Mixed Numbers Task</td>
<td>Walking 5 Miles Task</td>
<td>Reading a Book Task</td>
<td>Dividing Fractions Task</td>
</tr>
<tr>
<td>5.NF.B.4</td>
<td>80.7</td>
<td>5.NF.A.2</td>
<td>51.9</td>
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<tr>
<td>5.NF.B.6</td>
<td>42.8</td>
<td>5.NF.B.7c</td>
<td>63.6</td>
</tr>
<tr>
<td>MP4</td>
<td>11.0</td>
<td>MP2</td>
<td>12.3</td>
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</tbody>
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"The number to the right of the standard is the percentage of students receiving all possible points for that standard for the particular task. Typically, each standard for each task was worth one point, but in some instances it was worth two points."

#### Content Results:
Looking across the data for content from grade 5, between 50 percent and 80 percent of students earned the maximum number of points for standards 5.NF.B.4 and 5.NF.B.7. To show understanding on these content standards, students used procedural methods to calculate either products (whole number by fraction) or quotients (whole number divided by unit fraction or unit fraction divided by whole number).

#### Practice Results:
Looking across the data for practices, very few students demonstrated conceptual understanding of modeling their fractional equations (MP4). The strongest score (28.3 percent) for practice MP4 occurred in task 2 where students could model with either a diagram or an equation. The other tasks did not allow students to use equations. They were asked to model using number lines, diagrams, and other visual models.

#### The following examples are intended to help illustrate the use of visual fraction models to show the “interpretation” of division in 5.NF.B.7.
Students developed understanding of unit fractions in grade 3 (3.NF.A.1: Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b parts) and interpreting whole number quotients (3.OA.A.2: Interpret whole-number quotients of whole numbers, e.g., interpret 56 divided by 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each). However, grade 5 is the first time students are asked to extend their understanding of division to unit fractions and whole numbers. Teachers can help students connect their understanding of unit fractions and division by drawing visual models to demonstrate the division process.
The work of 5.NF.B.7a focuses students on their ability to “interpret division of a unit fraction by a non-zero whole number, and compute such quotients.” As seen in the data above, students showed success in computing the quotients but not in interpreting the division through the use of a visual model. The following example illustrates the use of a visual model to show the division of a unit fraction by a whole number.

**Example:** Draw a visual model to show $\frac{1}{3} \div 4 = \frac{1}{12}$

Students begin by drawing a model to show $\frac{1}{3}$.

\[
\begin{array}{ccc}
1/3 & 1/3 & 1/3 \\
\end{array}
\]

Next, students divide $\frac{1}{3}$ into 4 equal parts which yields a fractional part equal to $\frac{1}{12}$.

\[
\begin{array}{ccccccccc}
\text{1/3} & \text{1/3} & \text{1/3} & \text{1/3} \\
\end{array}
\]

The work of 5.NF.B.7b focuses students on their ability to “interpret division of a whole number by a unit fraction, and compute such quotients.”

**Example:** Use a number line to show $3 \div \frac{1}{2} = 6$. The following example illustrates the use of a number line to model the division of a whole number by a unit fraction.

Students begin by drawing a number line labeled from 0 to 3.

\[
\begin{array}{cccccc}
0 & 1 & 2 & 3 \\
\end{array}
\]

Next, students show dividing by $\frac{1}{2}$ by partitioning each section into 2 pieces.

\[
\begin{array}{cccccc}
0 & 1 & 2 & 3 \\
\end{array}
\]

The number line now shows 6 equal partitions from 0 to 3 therefore modeling $3 \div \frac{1}{2}$ equals 6.

**Looking ahead:** Students will extend their understanding of division with unit fractions in grade 6 as they engage in learning activities aligned to 6.NS.A.1 (Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem).
Helpful Resources

- Phase 1 CRA Tasks and Scoring Guides 2012-2013 on www.TNCore.org:
  - Cutting Ribbons
  - Stew Recipe
- Phase 2 CRA Tasks and Scoring Guides 2012-2013 on www.TNCore.org:
  - Cups of Flour
  - Charlie’s Number Lines
- Summative CRA Tasks and Scoring Guides 2012-2013
  - Walking 5 Miles
  - Dividing Fractions
- Task Analysis Guide on www.TNCore.org
- PARCC Model Content Frameworks on www.parcconline.org
- Learning Progressions on www.turnonccmath.net
### A Plan for the 5th Grade Professional Learning Community

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Look for particular tasks that had strong or low overall scores. (For example, our students scored strongest on task 1 and lowest on task 4.) |
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Third Grade Multiplication Task

Dylan had to solve this multiplication problem:

\[ 3 \times 18 = ? \]

Dylan claims, "I can add two multiplication facts I know in order to figure out the product of \( 3 \times 18 \). Here is my new expression."

\[ (3 \times 9) + (3 \times 9) \]

a. Draw a diagram of either the multiplication problem, \( 3 \times 18 \), or of Dylan’s expression, \( (3 \times 9) + (3 \times 9) \).

b. Explain the relationship between the multiplication problem, \( 3 \times 18 \), and Dylan’s expression, \( (3 \times 9) + (3 \times 9) \).
c. Use Dylan’s method to solve the multiplication problem $7 \times 19$. Use a diagram or equation to show the relationship between your new expression and $7 \times 19$. 
Review and Reflection Questions
(Small Groups)

1. Compare your solution paths.

2. Discuss which practices you used to complete the task.

3. What is essential for students to understand to successfully complete this task?
Third Grade Task – Unpack and Analyze

Suppose I have 7 bags of Valentine’s M&M’s. Each bag contains 23 M&M’s. How many M&M’s do I have?

What are the number of groups? ________________
What are the number of items in each group? ________________

• Decomposing the Number of Groups

1. How can I write an equation that will allow me to find the total number of M&M’s by decomposing the number of bags?

2. Are there other ways to decompose the groups?

• Decomposing the Number of Items in Each Group

1. How can I write an equation that will allow me to find the total number of M&M’s by decomposing the number of M&Ms?

2. Are there other ways to decompose the number of items in the groups?
Area Models

I. Partition the area model to show decomposing the number of bags.

II. Partition the area model to show decomposing the number of items in each bag.

III. Partition the area model to show decomposing the number of bags and the number of items in each bag.
Instructional Shifts: Coherence

Use the Distributive Property to explain why you have to “move over” in the second row in multiplication using the standard algorithm?

\[(x+5)(x+3)\]

Application and Connections:

1. Draw an area model for \((x+5)(x+3)\).

2. What is the product for \((x+5)(x+3)\)?
Instructional Shifts: Coherence (continued)

Which is greater: $25 \times 7$ or $27 \times 5$?

Application and Connections:

1. Which is greater: $25 \times 7$ or $27 \times 5$, and by how much?

2. Explain using the distributive property.

Distributive Property: The essential understanding is that when you have a specific number of groups and items in each group, you can decompose and distribute the groups or items in the group to make more groups that are smaller in size, but the product remains the same.
**Conceptual Understanding**

Knowledge that has been learned with understanding provides the basis of generating new knowledge and for solving new and unfamiliar problems. When students have acquired conceptual understanding in an area of mathematics, they see connections among concepts and procedures and can give arguments to explain why some facts are consequences of others. They gain confidence, which then provides a base from which they can move to another level of understanding.


**Making Connections between Representations**

Adapted from Lesh, Post, & Behr, 1987
Analyzing Student Work

Review and Reflections:

1. What are trends you notice across the student work? (Be specific.)

Strengths:

Challenges:

2. Do you believe that students have the understanding about the Distributive Property that they need to have? Why or why not?
### Recording Expectations for Students and Teachers

<table>
<thead>
<tr>
<th>Student Expectations</th>
<th>Teacher Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are student expectations for completing the task successfully?</td>
<td>What are the teacher expectations for making sure students complete the task successfully?</td>
</tr>
</tbody>
</table>
Planning the Conversation

Key Points to Remember:
1. Keep the focus of the conversation founded in student work and student thinking.
2. Ask questions will encourage reflections and model the importance of asking questions for learning.
3. Press for evidence and specificity.

Sample Questions:
- What trends did you find in the student work? Strengths and challenges? (Press for evidence.)
- What insights does this give you about where your students are in relation to the goals? (Be specific.)
- What would it take to move students closer to the understanding they need? (Be specific.)
- What will you do differently as a result of looking at student work? (Be specific.)
- What can I help you with? (Be specific.)

Plan Your Conversation:
### Characteristics of Questions that Support Students’ Exploration

<table>
<thead>
<tr>
<th>Assessing Questions</th>
<th>Advancing Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Based closely on the work the student has produced.</td>
<td>• Use what students have produced as a basis for making progress toward the target goal.</td>
</tr>
<tr>
<td>• Clarify what the student has done and what the student understands about what s/he has done.</td>
<td>• Move students beyond their current thinking by pressing students to extend what they know to a new situation.</td>
</tr>
<tr>
<td>• Provide information to the teacher about what the student understands.</td>
<td>• Press students to think about something they are not currently thinking about.</td>
</tr>
</tbody>
</table>
Structures and Routines of a Lesson

Set-Up of the Task

The Explore Phase/Private Work Time
Generate Solutions

The Explore Phase/Small-Group Problem Solving
1. Generate and Compare Solutions
2. Assess and Advance Student Learning

Share Discuss and Analyze Phase of the Lesson
1. Share and Model
2. Compare Solutions
3. Focus the Discussion on Key Mathematical Ideas
4. Engage in a Quick Write

MONITOR: Teacher selects examples for the Share Discuss based on:
- Different solution paths to the same task
- Different representations
- Errors
- Misconceptions

SHARE: Students explain their methods, repeat others’ ideas, put ideas into their own words, add on to ideas and ask for clarification.

COMPARE: Students discuss similarities and differences between solution paths.

FOCUS: Discuss the meaning of mathematical ideas in each representation.

REFLECT: Engage students in a Quick Write or a discussion of the process.
Reflections and Looking Ahead

1. What are 1-2 take-aways that you have from this math module?

2. What are you going to do between now and Class 2 to support your students with challenging math content?

3. Based on what you learned today, what are you going to share with your teachers?
Appendix

Tennessee Department of Education
Common Core Leadership Course 202
Contact Information:

With questions, please contact:

• TNcore.questions@tn.gov or
• Your facilitators

Your facilitators today are:

Name: _____________   Email: _____________________

Name: _____________   Email: _____________________
Tennessee Department of Education
Common Core Leadership Course 202

Notes: