

# ARKANSAS GENERAL ASSEMBLY

## HOUSE INTERIM COMMITTEE ON EDUCATION and SENATE INTERIM COMMITTEE ON EDUCATION

Senator Johnny Key  
Senate Chair

Representative James McLean  
House Chair

### MEMORANDUM

**TO:** The Members of the Senate Interim Committee on Education  
The Members of the House Interim Committee on Education

**FROM:** Mark Hudson  
Legislative Analyst

**SUBJECT:** Additional Materials Regarding the Common Core State Standards Initiative

**DATE:** September 10, 2013

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At the request of Senator Johnny Key, the Chair of the Senate Interim Committee on Education, attached is the following additional information regarding the Common Core State Standards Initiative (CCSSI) that have been received since the July 22, 2013, and July 23, 2013 meetings:

Attachment A - Written version of the testimony given by Mr. Randy Zook, the President and CEO of the Arkansas State Chamber of Commerce/Associated Industries of Arkansas at the July 23, 2013, joint meeting

Attachment B - Links to additional information regarding CCSSI and Christian/home school curricula

Attachment C - Comments on the Common Core State Standards for Mathematics by Dr. Bernard Madison, Professor of Mathematics, University of Arkansas, Fayetteville

Attachment D - CCSSI and the Curriculum at the Arkansas School for Mathematics, Sciences, and the Arts (ASMSA)

Attachment E - Response from A Beka Publishing Company, a supplier of home school text books, concerning A Beka and the Common Core Standards

Attachment F - Response from the Arkansas Department of Education regarding CCSSI implementation costs

Attachment G - Response from the Arkansas Department of Education regarding ADE's outreach efforts concerning CCSSI

I hope you will find this preliminary information helpful. Please do not hesitate to contact Senator Key or me if you have any questions or if you need additional information. My telephone number is 501-537-9173.

Attachments



## Attachment A

Written testimony given by Mr. Randy Zook, the President and CEO of the Arkansas State Chamber of Commerce/Associated Industries of Arkansas

## State Chamber CEO Presents Business Case for Common Core Standards

21 hours ago (0 Comments)

Posted by: Gary Newton

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*The following testimony was presented Tuesday, July 23, 2013 by Randy Zook, president and CEO of the Arkansas State Chamber of Commerce, and closed the two-day hearing by the Joint House and Senate Interim Committees on Education's hearing on the Common Core Standards.*

I'm Randy Zook, president and CEO of the Arkansas State Chamber of Commerce, We are comprised of over 1,300 Arkansas businesses, employing more than 300,000 Arkansans. I come before you today in strong support of continued, full speed implementation of the Common Core Standards.

At its core, Common Core is fundamentally an issue of competitiveness and resulting individual, family, community and state economic progress or lack thereof.

National political organizations opposing Common Core energize and excite their support bases by deriding the Standards as a federal mandate and imposition of a nationalized curriculum. We all know this is just not the case.

For those who want to throw the states' baby out with the feds' bathwater, I would ask you to consider the alternative. Arkansas recently tied with four other states at 43rd and earned a D grade when comparing proficiency on our state benchmark exams to proficiency as measured by the National Assessment of Education Progress (NAEP). But, comparing Arkansans to Arkansans, we are lulled into believing 77% of our eighth graders are proficient in math. But when our eighth graders were compared with the nations', only 29% were proficient. It's the education equivalent of giving kids a trophy for participation. Don't keep score. Don't compete. But by all means, inflate your self-esteem by just going through the motions.

It's a lot like the Hogs bragging about an undefeated season after only playing the Red-White Game. It's a different story when the season starts, particularly when you're competing not against yourselves, but with the very best in the nation, if not the world.

For those who still believe we can build a wall around Arkansas and be just fine, I suppose Common Core is unnecessary. But for those who know our children and grandchildren are not just competing with talent in Arkansas, but with their contemporaries across America and around the world, we must know how we compare – apples to apples.

In the thirteen years of K through 12, we spend nearly \$150,000 on each student in Arkansas. And our return on investment? One in five don't graduate. Nearly half of all college-bound students require remediation. And we're 49th in percentage of our people with a four-year degree.

Though talent is the new driver of economic development, Arkansas is treading water on far too many measures, and we seem determined not to acknowledge it openly.

While much is made of the short-term costs of implementation, consider the long-term costs to Arkansas's students, businesses and economy if we stop or seriously delay increased rigor and accountability? Today, thousands of jobs are going wanting in Arkansas because we simply do not have the educated, trained, drug-free workforce to fill them.

Finally, Common Core is simply, Common Sense. On behalf Arkansas's business community, I ask that you trust yours, put students first, and reject those who would not only hold Arkansas back, but would deny our children and grandchildren the tools to compete.



## Attachment B

Links to additional information regarding CCSSI  
and Christian/home school curricula

**Hudson, Mark**

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**From:** Hudson, Mark  
**Sent:** Saturday, July 27, 2013 9:52 AM  
**Cc:** Benda, Brent; Bowen, Lori; Ganahl, Sarah A.; Gillip, Mandy M.; Smith, Nell M.; Tackett, Heather M.; Whorton, Rebeca M.; Wilson, Richard  
**Subject:** Common Core State Standards and home school/Christian School Curricula  
**Attachments:** Christianity Today.docx  
  
**Importance:** High

At the request of Senator Key, listed below are links that Committee members may find helpful with regard to issues concerning the Common Core State Standards and home schools and Christian schools:

**[Link to website explaining how Bob Jones University, a publisher of home school and Christian school curricula, is dealing with Common Core State Standards](http://www.bjupress.com/resources/common-core-standards/)**

<http://www.bjupress.com/resources/common-core-standards/>

**[Link to article from Christianity Today regarding Common Core State Standards \(a three \(3\) page Word document version is also attached\)](http://www.christianitytoday.com/ct/2013/june-web-only/good-news-of-common-core.html?start=2)**

<http://www.christianitytoday.com/ct/2013/june-web-only/good-news-of-common-core.html?start=2>

I hope this information is helpful. Please do not hesitate to contact Senator Key or me if you have any questions or if you need additional information..

**Mark Hudson**

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## Attachment C

Comments on the Common Core State Standards for Mathematics by Dr. Bernard Madison, Professor of Mathematics, University of Arkansas, Fayetteville

August 2013

**Comments on the Common Core State Standards for Mathematics (CCSSM)**  
Bernard L. Madison, Professor of Mathematics, University of Arkansas, Fayetteville

First, allow me to disclose my major connections to the development of CCSSM.

1. I was a member of the CCSSM working group of authors and submitted some written materials on quantity and measurement along with Pat Thompson, Arizona State University. My contributions were minimal and are not evident in the final standards.
2. I was a member of a group of 25 college and university faculty members brought together to review CCSSM for the American Council on Education. This was in Fall 2009. At the time the only major component available was the eight Practice Standards. The review was mostly positive; at the time I noted that the standards were weak on applications of quantitative reasoning to everyday life as a US resident. I commented that in addition to CCSSM being aimed at college and career readiness, another c-word should be added: CCSSM should aim at college, career, and citizenship readiness.
3. I was a one of three people that reviewed CCSSM for the Mathematical Association of America. That review was also generally positive, but one of the reviewers, an applied mathematician, said that CCSSM was too weak on applications of mathematics.
4. I drafted the Standards Progression for mathematical modeling for high school. These drafts are being edited and refined and are not now generally available. The CCSSM do not generally indicate the order of the teaching of content. The Standards Progressions (one for each content strand usually separated into K-8 and high school) are narratives that explain how the various strands develop via the standards. Some are posted on <http://ime.math.arizona.edu/progressions/>.

**Concerns about CCSSM**

My major concern is that CCSSM is weak on applications. Although this may be remedied by citing examples of applications, many teachers will not emphasize applications. One reason for this is that applications are difficult to teach and learn. CCSSM basically outlines the mathematical and statistics content to be taught and often interjects something like the following: "Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot)."

More specifically, CCSSM is very weak on everyday applications to quantitative reasoning necessary to function as an informed citizen in a democracy. US society is very complex and highly demanding of quantitative reasoning – for understanding government, for economic prosperity, and for success in the workplace.

The major reason why mathematics is taught in each grade of K-12 is for use in understanding the world, that is, mathematical modeling. Mathematical modeling in CCSSM is not a separate strand. Instead, standards that are modeling standards are starred. In all of CCSSM for high school, the major appearance of starred standards is in probability and statistics where all are

starred as modeling standards. In fact, there is approximately the same number of starred standards in all of the other high school standards (algebra, functions, geometry and number and quantity) as there are in statistics.

Another concern is something that can be remedied: many teachers are not prepared to teach CCSSM. A major professional development is underway, but I fear it will not be sufficient. The major problem is likely to come at grades 6-8 where teachers will be asked to teach material that has been either not been taught (e.g. much of probability and statistics) or taught in high school.

The goal of CCSSM is that all students learn the material designated for the first three years of high school. This has been the goal of most state standards and was the goal of the 2000 NCTM standards by NCTM after which many state standards were modeled. This is a worthy goal and should be tried, but I am doubtful that it can succeed. The evidence with state standards over the past two decades indicates that this is not reasonable, but trouble has been avoided by various methods, for example, by lowering the bar of proficient.

My final concern is not with the CCSSM but with the way that they are being portrayed in the public media. I have read several accounts that attribute various teaching methods (e.g. inquiry based learning, collaborative learning, cognitively guided instruction) and course contents to CCSSM. None of this is in CCSSM. There is no specification of teaching methods, high school course content, or pedagogical methods in CCSSM. I fear that the public will attribute to CCSSM various unfamiliar and experimental teaching methods. This could lead to erosion of public support.

### **Some Positive Features of CCSSM**

The main strength of CCSSM is that they will be essentially the same in all states and, as a consequence, will receive much more attention for improvements, curricular materials, and information for professional development of teachers. Whatever is available on the website of one state will be available for teachers in other states and applicable to their teaching. An example of this is the development of the Standards Progressions. This development is probably beyond the capability (at least in the form they are now emerging) of a single state, especially a smaller state such as Arkansas. Also, students moving from one state to another likely will not see much change in their mathematics classes.

The standards are coherent and demanding of conceptual understanding that is critical for further study in science, mathematics, or engineering. They do guide development of the mathematics in a logical and coherent fashion. For example, algebraic thinking is developed from grade 1 and should not come as a shock when the symbolic algebra emerges in grades 7 and 8.



## Attachment D

CCSSI and the Curriculum at the Arkansas School  
for Mathematics, Sciences, and the Arts (ASMSA)

Hudson, Mark

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From: Melissa Rust [mrust@uasys.edu]  
Sent: Friday, August 09, 2013 12:54 PM  
To: Hudson, Mark  
Cc: Corey Alderdice  
Subject: FW: Common Core State Standards

Mark:  
Please let me know if you need additional information.  
Melissa

-----Original Message-----  
From: Corey Alderdice [mailto:alderdicec@asmsa.org]  
Sent: Friday, August 09, 2013 11:43 AM  
To: Melissa Rust  
Subject: Common Core State Standards

Melissa,

Thank you for your message regarding the Common Core State Standards. ASMSA's curriculum, particularly the components in mathematics and English, focus on college-level learning. Our frameworks for those content areas are largely beyond the foundational elements of the Common Core that seek to bring high school students to proficiency.

As an institution, we will only see the results of an implementation of the Common Core standards to the extent that colleges and universities will in the coming years as they pertain to preparing students for advanced learning.

We are, however, closely following the Next Generation Science Standards, which is separate though similar in goals to the Common Core. The majority of our teacher outreach on campus is within the sciences, so we are looking for ways to adapt our teacher enrichment programs to better address those topics.

Corey Alderdice  
Director  
Arkansas School for Mathematics, Sciences and the Arts

## Attachment E

Response from A Beka Publishing Company, a  
supplier of home school text books, concerning  
A Beka and the Common Core Standards

## Hudson, Mark

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**From:** Sawtelle, Corinne [cSawtelle@pcci.edu]  
**Sent:** Thursday, August 22, 2013 1:27 PM  
**To:** Hudson, Mark  
**Subject:** Questions Concerning A Beka and the Common Core Standards  
**Attachments:** CCSS.docx

In response to your email of July 29, I have attached a document outlining some reasons why we have not incorporated all the Common Core State Standards in the *A Beka Book* curriculum. I trust this is the type of information you were seeking.

Corinne Sawtelle  
Assistant Editor  
*A Beka Book* Publications



## **Learning Theory and Philosophy**

As a proponent of traditional education, *A Beka Book* employs proven methods and logical sequences of subject matter.

Recall, application, and understanding precede analysis, synthesis, and evaluation.

Math— The traditional approach to mathematics has the student first find success in application and understanding, and then conceptualize.

A problem we would have with full implementation of CCSS is that it deemphasizes performing procedure in favor of deeper cognitive understanding.

Instead of simply teaching multiplication tables, children are supposed to discover the knowledge for themselves.

Students are expected to explain the "why" of a procedure.

CCSS emphasis is on math fluency instead of accuracy.

Example: Algebraic formula in 3<sup>rd</sup> grade for finding area of rectangle... we choose to develop the arithmetic concept first and then show the algebraic equivalent in a later grade.

ELA-- In the traditional approach to education, the phonetic approach provides the strongest tools for learning to read.

Students find success in reading words and then meaningful understanding follows.

Emphasis is placed on the aesthetics and value of the whole literary work, especially the classics.

CCSS deemphasizes great literary works and the enjoyment of reading in favor of informational texts and contrived analysis.

CCSS utilizes deconstructionism instead of contextual and holistic meaning.

Example: Informational text in Gr. 4,8—compare and contrast first and second hand accounts; analyze the extent to which a filmed or live production of story is faithful to original; evaluate choices made by directors and actors.

Information text in Gr. 8, 9, 10—evaluate advantages and disadvantages of different mediums—print, digital, video, multimedia— analyze accounts of a subject through different mediums.

## **Principles and Values**

We adopt Christian values and support the principle of freedom to educate children with those beliefs.

We would not support mandated instructional methods to include content contrary to our values.  
(alternative families vs. traditional families; use of Hollywood movies to contrast a literary work)

We are generally in support of educational freedom where proven methods and systems have been successful.

## Attachment F

Response from the Arkansas Department of  
Education regarding CCSSI Implementation Costs

## *Department of Education Response to the Request for the Cost to Implement Common Core*

In response to the question regarding how much the Department of Education has spent on the implementation of the Common Core State Standards (CCSS), the Department indicated that the process of implementing the Common Core State Standards has been a part of their regular ongoing activities of standards review, evaluation, revision, and implementation.

As outlined in § 6-15-403, The State Board of Education through the Department of Education shall:

- (1) Develop a single comprehensive testing, assessment, and accountability program which utilizes the most current effective testing, evaluation, and assessment research information designed to achieve the following purposes:
  - b. To transition to and implement the Common Core State Standards, the State Board of Education may:
    - (1) Modify curriculum and assessment requirements;
    - (2) Adopt new curriculum and assessment requirements; and
    - (3) Direct the Department of Education to:
      - (A) Propose to the state board rules and procedures; and
      - (B) Develop the professional development needed to train educators on the transition and implementation.

They have not historically or presently created cost center coding to track or maintain records on the costs for these activities generally or on the CCSS implementation costs specifically. The Department does not have a specific state funded appropriation nor did they receive an increase in state funding specifically for the implementation of the CCSS.

There are, however, a few budget items, a Federal sub-grant from the Partnership for Assessment of Readiness for College and Careers and a few foundation grants for CCSS implementation, that are more readily identifiable as it relates to CCSS implementation, and are described in more detail below.

### **Grants Received for Common Core State Standards Implementation**

The Department of Education has received a federal sub-grant through the PARCC consortium for the Department's expenses related to their participation in the consortium and two additional grants to support the work of implementing the CCSS.

According to the PARCC Consortium, it "is a consortium of 19 states plus the District of Columbia and the U.S. Virgin Islands working together to develop a common set of K-12 assessments in English and math anchored in what it takes to be ready for college and careers." The federal PARCC sub-grant comes to the Arkansas Department of Education via reimbursements for travel expenses for Department staff to participate in consortium activities and for the cost of a Department staff person assigned to work with the consortium. The Department has expended and subsequently received a total of \$159,591 in reimbursements through the PARCC Consortium. The Table below shows the Department's expenditures of the sub-grant by fiscal year.

<b>Expenditures of Arkansas' Sub-Grant of PARCC Federal Race to the Top Grant</b>		
<b>FY2010-11</b>	<b>FY2011-12</b>	<b>FY2012-13</b>
\$ 20,234	\$ 41,413	\$ 97,944

In addition, the Department received a private foundation grant from the Walton Foundation in the amount of \$188,000 in September 2011 and \$200,000 in November 2012 for the CCSS implementation. The Department expended \$376,000 of these grant monies in FY2013 by granting \$188,000 each to the Northwest Arkansas Education Cooperative and the Southwest Arkansas Education Cooperative. The purpose of this private grant was to help communicate those important messages that need to be shared with state-wide audiences about the implementation of next generation learning and assessments.

The Department of Education also received a \$75,000 grant from the Cross-State Learning Collaborative for CCSS, which the Department has distributed to the Arkansas Association of Educational Administrators as a "Teacher Effectiveness Grant".

**Other Potential Costs**

Assessment Costs

There is a need for revised student assessment tools as part of the implementation of the CCSS. The assessment for Arkansas' students that will be aligned with the new CCSS is being developed by the Partnership for Assessment of Readiness for College and Careers (PARCC). The Department of Education currently contracts with Questar Assessment Incorporated for producing, administering, scoring, and reporting norm referenced assessments for First Grade, Second Grade and Ninth Grade, Arkansas Augmented Benchmark Examinations for Grades 3-8, End-of-Course Exams, Grade 11 Literacy Exams, and Alternative Assessments required under the federal requirements of ESEA Title I. According to the Department they spent \$37.62 per student for 2012-2013 school year testing. According to PARCC, the "PARCC summative tests in reading, writing and math are estimated to cost \$29.50 per student for computer-based administration of the assessment."

The Department has an appropriation authorized for Assessment/End of Course Testing, which provides for the cost of the Department's current assessment contracts. According to the Department of Education, there are still some uncertainties regarding what the per student cost for the PARCC assessments will ultimately be, but the Department anticipates that the cost of the PARCC assessments will be comparable to the current contract costs for assessing Arkansas students. The new assessments will be field tested in the spring of 2014 and will be fully implemented in the 2014-15 school year. The Table below provides the expenditures by the Department of Education for Assessment/End-of-Course testing for the period FY2009 through FY2013 to illustrate what has been expended for assessments over the last five (5) years.

<b>Actual Expenditures Assessment/End of Course Testing</b>				
<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
\$ 15,473,393	\$ 19,038,234	\$ 19,912,703	\$ 18,481,643	\$ 17,215,594

### Technology Costs

Next generation learning requires that students have access to digital learning; therefore potential costs for technology could include the expansion of bandwidth and technology infrastructure. This infrastructure is necessary to achieve students who are equipped to be college and career ready. The Quality Digital Learning Study Committee as created by the 89th General Assembly is currently meeting to evaluate school districts' technology resources and capacity and to recommend how to meet the next generation technology requirements.

Prepared by the Bureau of Legislative Research - August 2013

#### *Sources:*

*Arkansas Department of Education*

*Arkansas Administrative Statewide Information System (AASIS).*

*<http://www.parcconline.org/>*

## Attachment G

Response from the Arkansas Department of Education (ADE) regarding ADE's outreach efforts concerning CCSSI

Date	Title	Synopsis	Audience	Delivery Mode
9/29/2011	Common Core State Standards Mathematics 1	In this session, problem types in mathematics curriculum development in grades K-4, differentiation between Common Core Mathematics Content Standards and Mathematics Curriculum, and extending problem types to middle and high school for continuity were discussed. More than 550 educators, including superintendents, school board members, community members, higher education representatives, curriculum directors, district-level content specialists, principals, and teachers gathered in Little Rock, Ark., to delve into national and state policy perspectives of the Common Core State Standards, instructional and assessment implications, and ways to build community support for the implementation of the standards.	math specialists, math teachers	CIV
10/11/2011	Arkansas Common Core State Standards Summit 1	The purpose of this session was to discuss the Standards for Mathematical Practice and the role of vocabulary in high quality mathematics curriculum.	superintendents, school board members, community members, higher education representatives, curriculum directors, principals, and teachers	live audience
12/1/2011	Common Core State Standards Mathematics 2	The purpose of this institute was to explain the Arkansas CCSS Strategic Plan. The seven action areas of the plan, resources, the CCSS micro-website and "Need to Know" tool were discussed.	math specialists, math teachers	CIV
12/8/2011	Institute 1 - Arkansas Common Core Strategic Plan	Stephen Barkley addressed how focusing on student learning rather than teaching opens the doors for coaching, facilitating, collaborating, and differentiating instruction.	all educators	CIV
1/27/2012	Leadership Series 1 - Facilitating Learning for Teachers and Students	This institute focused on assessment literacy by providing suggestions for designing an assessment plan focused on the CCSS for math and ELA.	instructional leaders	CIV
1/31/2012	Institute 2 - Assessment Literacy	Dianne Sweeney addressed how focusing coaching on specific goals for student learning can make a positive impact on student achievement and build capacity in districts and schools.	all educators	live stream, CIV
2/2/2012	Leadership Series 2 - Student-Centered Coaching and Capacity Building for Instructional Leaders	This session provided an overview of the CCSS for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects as well as the role of content teachers in literacy practices.	instructional leaders	CIV
2/15/2012	English Language Arts 1 - Disciplinary (Content) Literacy Overview	In this session, Dr. Linda Griffith discussed the implementation of CCSS mathematics and transition "gaps"	ELA specialists, ELA teachers	live stream, CIV
2/29/2012	Common Core State Standards Mathematics 3	This statewide event was designed to involve community shareholders in discussion of the Common Core State Standards.	math specialists, math teachers	live stream, CIV
3/8/2012	Arkansas Common Core State Standards Summit 2 - Connecting Common Core and Community for the Whole Child: A Community Conversation	The purpose of this institute was to concentrate on planning for formative assessment within CCSS for math and ELA.	community members	live stream
3/13/2012	Institute 3 - Lesson Planning for Formative Assessment		all educators	live stream, CIV
3/14/2012	TOT - Problem Situations: Addition and Subtraction and the Nature of "Equals" Grades K-3 Part One	This session investigated the different types of addition and subtraction situations and children's understanding of the equal sign.	math specialists, math teachers	live stream, CIV



Date	Title	Synopsis	Audience	Delivery Mode
3/15/2012	TOT - Problem Situations: Multiplication and Division and the Nature of "Equals" Grades K - 6 Part One	In this session, the following problems situations were investigated: multiplication (unknown product) and division (group size unknown and number of groups unknown) that are foundational for the fractions, the base-ten numbers system, facts fluency and multi-digit multiplication and division. Additionally, children's understanding of the equal sign and the role it plays in developing children's understanding of multiplication and division was analyzed.	math specialists, math teachers	live stream, CIV
3/26/2012	TOT - Problem Situations: Addition and Subtraction and the Nature of "Equals" Grades K-3 Part Two	This session investigated the different types of addition and subtraction situations and children's understanding of the equal sign. In this session, the following problems situations were investigated: multiplication (unknown product) and division (group size unknown and number of groups unknown) that are foundational for the fractions, the base-ten numbers system, facts fluency and multi-digit multiplication and division. Additionally, children's understanding of the equal sign and the role it plays in developing children's understanding of multiplication and division was analyzed.	math specialists, math teachers	live stream
3/27/2012	TOT - Problem Situations: Multiplication and Division and the Nature of "Equals" Grades K - 6 Part Two	This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. This module focused on exposing students to grade-level texts of appropriate complexity. In addition, it focused on instruction that reflects a balance of 50 percent informational text and 50 percent literature that students are expected to read in ELA, science, social studies and the arts. The session delved into the mathematics available for instruction when students engage in equal sharing problems	math specialists, math teachers	live stream
3/28/2012	TOT - Informative/Explanatory Writing 4-5	This course investigated the 3 different types of multiplication and division situations (equal grouping, multiplicative comparison and area/array). This module provided strategies to enable participants to design instruction that promotes close reading behaviors.	math specialists, math teachers	live stream, CIV
3/29/2012	TOT - Text Complexity 6-12	This module provided strategies to enable participants to design instruction that promotes close reading behaviors.	ELA specialists, ELA teachers	live stream
4/5/2012	TOT - Fraction Concepts: Equal Sharing Grades 1 - 6 Part One	This module provided strategies to enable participants to design instruction that promotes close reading behaviors.	math specialists, math teachers	live stream, CIV
4/6/2012	TOT - Other Problem Situations: Multiplication and Division Grades 3-6 Part One	This module provided strategies to enable participants to design instruction that promotes close reading behaviors.	math specialists, math teachers	live stream, CIV
4/10/2012	TOT - Close Reading 6-12	This module addressed strategies the writer uses to craft a convincing argument to change the reader's point of view, to bring about some action on the reader's part, or to ask the reader to accept the writer's explanation or evaluation of a concept, issue, or problem. This module provided strategies that will enable participants to design instruction that promotes close reading behaviors.	ELA specialists, ELA teachers	live stream
4/11/2013	TOT - Argumentative Writing 6-12	The session delved into the mathematics available for instruction when students engage in equal sharing problems	ELA specialists, ELA teachers	live stream
4/12/2012	TOT - Close Reading 3-5	This workshop investigated the 3 different types of multiplication and division situations (equal grouping, multiplicative comparison and area/array).	math specialists, math teachers	CIV, live stream
4/16/2013	TOT - Fraction Concepts: Equal Sharing Grades 1 - 6 Part Two	This workshop investigated the 3 different types of multiplication and division situations (equal grouping, multiplicative comparison and area/array).	math specialists, math teachers	CIV, live stream
4/17/2012	TOT - Other Problem Situations: Multiplication and Division Grades 3-6 Part Two		math specialists, math teachers	CIV, live stream

Date	Title	Synopsis	Audience	Delivery Mode
4/18/2012	TOT - Developing the Base Ten System Grades K-6 Part One	<p>In this session, participants made sense of the base 10 system through number and properties of operations. They began by looking at the roots that begin in kindergarten based in the counting sequence, to generalizing place value understanding for multi-digit whole number in fourth grade and finally making connections for 5th and 6th grade to the decimal system.</p> <p>This workshop focused on the development of children's understanding of single digit operations using manipulatives/pictures to applying properties of operations to solve fact problems in addition, subtraction, multiplication and division.</p>	math specialists, math teachers	CIV, live stream
4/19/2012	TOT - Developing Fact Fluency Grades K-3 Part One	<p>This module provided grade-appropriate learning strategies to enable students to name a topic, supply relevant facts, and provide closure.</p> <p>This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors, which increase students' vocabularies.</p> <p>This module addressed the phonics and structural analysis instruction that will enable students to decode and comprehend multisyllabic words.</p> <p>This session focused on defining text complexity and its overarching role in the CCSS, the demands of complex text on the reader, and high yield questioning strategies to use when helping students comprehend complex text.</p>	math specialists, math teachers	CIV, live stream
4/23/2012	TOT - Informative/Explanatory Writing K-3	<p>This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors, which increase students' vocabularies.</p> <p>This module addressed the phonics and structural analysis instruction that will enable students to decode and comprehend multisyllabic words.</p> <p>This session focused on defining text complexity and its overarching role in the CCSS, the demands of complex text on the reader, and high yield questioning strategies to use when helping students comprehend complex text.</p>	ELA specialists, ELA teachers	live stream
4/24/2012	TOT - Informative/Explanatory Writing 6-12	<p>This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors, which increase students' vocabularies.</p> <p>This module addressed the phonics and structural analysis instruction that will enable students to decode and comprehend multisyllabic words.</p> <p>This session focused on defining text complexity and its overarching role in the CCSS, the demands of complex text on the reader, and high yield questioning strategies to use when helping students comprehend complex text.</p>	ELA specialists, ELA teachers	live stream
4/25/2012	TOT - Vocabulary: Greek and Latin Roots 4-5	<p>This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors, which increase students' vocabularies.</p> <p>This module addressed the phonics and structural analysis instruction that will enable students to decode and comprehend multisyllabic words.</p> <p>This session focused on defining text complexity and its overarching role in the CCSS, the demands of complex text on the reader, and high yield questioning strategies to use when helping students comprehend complex text.</p>	ELA specialists, ELA teachers	live stream
4/26/2013	TOT - Phonics and Structural Analysis K-3	<p>This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors, which increase students' vocabularies.</p> <p>This module addressed the phonics and structural analysis instruction that will enable students to decode and comprehend multisyllabic words.</p> <p>This session focused on defining text complexity and its overarching role in the CCSS, the demands of complex text on the reader, and high yield questioning strategies to use when helping students comprehend complex text.</p>	ELA specialists, ELA teachers	live stream
4/30/2012	English Language Arts 2 - Close Reading of Complex Text Part One	<p>This module provided grade-appropriate learning strategies to enable students to write informative/explanatory text to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors, which increase students' vocabularies.</p> <p>This module addressed the phonics and structural analysis instruction that will enable students to decode and comprehend multisyllabic words.</p> <p>This session focused on defining text complexity and its overarching role in the CCSS, the demands of complex text on the reader, and high yield questioning strategies to use when helping students comprehend complex text.</p>	ELA specialists, ELA teachers	live stream, CIV
5/3/2012	TOT - Developing the Base Ten System Grades K-6 Part Two	<p>In this session, participants made sense of the base 10 system through number and properties of operations. They began by looking at the roots that begin in kindergarten based in the counting sequence, to generalizing place value understanding for multi-digit whole number in fourth grade and finally making connections for 5th and 6th grade to the decimal system.</p> <p>This workshop explored the mathematics and strategies raised when students tackle "multiple grouping" problems, problems "involving a whole number of equal groups of fractional amounts."</p> <p>This module focuses on exposing students to grade-level texts of appropriate complexity. In addition, it focuses on instruction that reflects a balance of 50 percent informational text and 50 percent literature that students are expected to read in ELA, science, social studies and the arts.</p>	math specialists, math teachers	live stream
5/4/2012	TOT - Fraction Operations: Multiple Grouping Grades 3-6 Part One	<p>This module focuses on exposing students to grade-level texts of appropriate complexity. In addition, it focuses on instruction that reflects a balance of 50 percent informational text and 50 percent literature that students are expected to read in ELA, science, social studies and the arts.</p> <p>This module provided strategies to enable participants to design instruction that promotes behaviors which increase students' vocabularies.</p>	math specialists, math teachers	live stream
5/7/2012	TOT - Text Complexity 2-5	<p>This module provided strategies to enable participants to design instruction that promotes behaviors which increase students' vocabularies.</p>	ELA specialists, ELA teachers	live stream
5/8/2012	TOT - Vocabulary 6-12	<p>This module provided strategies to enable participants to design instruction that promotes behaviors which increase students' vocabularies.</p>	ELA specialists, ELA teachers	live stream

Date	Title	Synopsis	Audience	Delivery Mode
5/9/2012	TOT - ELLA (Early Literacy Learning in Arkansas) Update - Aligning Instruction to CCSS	In this module, participants were updated on changes made to ELLA professional development to increase its alignment with CCSS.	ELA specialists, ELA teachers	live stream
5/11/2012	TOT - Effective Literacy for 2nd-4th Update - Aligning Instruction to CCSS	In this module, participants were updated on changes made to Effective Literacy professional development to increase its alignment with CCSS.	ELA specialists, ELA teachers	live stream
5/10/2012	Institute 4 - Learning Progressions in ELA and Math	This institute focused on the learning progressions within the CCSS for math and ELA.	all educators	live stream, CIV
5/14/2012	TOT - Strategies, Algorithms and Recording Systems: Multi-digit Addition and Subtraction Grades 1-4 Part One	This workshop focused on children's development of strategies from manipulatives/pictures to applying properties of operations to solve multi-digit addition and subtraction problems.	math specialists, math teachers	live stream
5/15/2012	TOT - Strategies, Algorithms and Recording Systems: Multi-digit Multiplication and Division Grades 3-6 Part One	In this session, participants focused on children's development of strategies from manipulatives/pictures to applying properties of operations to solve multi-digit multiplication and division problems. The focus of this session was the role of content progressions and learning progressions in developing mathematics curriculum.	math specialists, math teachers	live stream
5/16/2012	Common Core State Standards Mathematics 4	This module provided an overview of the foundational skills students need in order to achieve grade level expectations.	math specialists, math teachers	live stream, CIV
5/17/2012	TOT - Foundational Skills K-5	This workshop focused on the development of children's understanding of single digit operations using manipulatives/pictures to applying properties of operations to solve fact problems in addition, subtraction, multiplication and division.	ELA specialists, ELA teachers	live stream
5/21/2012	TOT - Developing Fact Fluency Grades K-3 Part Two	This workshop explored the mathematics and strategies raised when students tackle "multiple grouping" problems, problems "involving a whole number of equal groups of fractional amounts."	math specialists, math teachers	live stream
5/22/2012	TOT - Fraction Operations: Multiple Grouping Grades 3-6 Part Two	This workshop focused on children's development of strategies from manipulatives/pictures to applying properties of operations to solve multi-digit addition and subtraction problems.	math specialists, math teachers	live stream
5/23/2012	TOT - Strategies, Algorithms and Recording Systems: Multi-digit Addition and Subtraction Grades 1-4 Part Two	In this session, participants focused on children's development of strategies from manipulatives/pictures to applying properties of operations to solve multi-digit multiplication and division problems.	math specialists, math teachers	live stream
5/24/2012	TOT - Strategies, Algorithms and Recording Systems: Multi-digit Multiplication and Division Grades 3-6 Part Two	This institute presented the key components of the ESEA Flexibility for Arkansas.	all educators	CIV
7/16/2012	Institute 5 - ESEA Flexibility	In this institute, Curriculum Specialists introduced and answered questions about the new high school math and ELA course offerings for the 2013-2014 school year.	administrators, secondary principals, central office curriculum administrators, instructional facilitators, counselors	live stream, CIV
10/15/2012	Institute 6 - ADE Curriculum Frameworks Discussion for new 4th Credit Math Courses and Additional ELA Course Offerings under CCSS	Dr. Griffith and other educators discussed with administrators the Purposeful Pedagogy and Discourse Model that is the centerpiece of new mathematics professional development and how to support teachers as they implement the Common Core mathematics standards. The focus of this session was differentiation in the high school mathematics classroom with an emphasis on the role of formative assessment.	administrators and instructional facilitators	live stream, CIV
10/15/2012	Common Core State Standards Mathematics 5 - Purposeful Pedagogy and Discourse Model		secondary mathematics teachers, instructional facilitators, principals, central office personnel	live stream, CIV
10/24/2012	Common Core State Standards Mathematics 6 - Differentiation in the Secondary Mathematics Classroom			live stream, CIV

Date	Title	Synopsis	Audience	Delivery Mode
10/24/2012	Common Core State Standards Mathematics 7 - Differentiation in the Elementary Mathematics Classroom	The focus of this session was differentiation in the elementary mathematics classroom with an emphasis on the role of formative assessment.	elementary mathematics teachers, instructional facilitators, principals and central office personnel	live stream, CIV
10/30/2012	TOT - Functions: Grades 6 - 12 Part One	This session explored the five big ideas from the text <i>Developing Essential Understanding of Expressions, Equations and Functions: Grades 6-8</i> from NCTM: expressions, variables, equality, representing and analyzing functions and solving equations.	math specialists, math teachers	live stream
10/31/2012	TOT - Functions: Grades 6 - 12 Part Two	This session explored the five big ideas from the text <i>Developing Essential Understanding of Expressions, Equations and Functions: Grades 6-8</i> from NCTM: expressions, variables, equality, representing and analyzing functions and solving equations.	math specialists, math teachers	live stream
11/7/2012	Leadership Series 4 - Diane Sweeney presents Results Based: Student Centered Coaching	In this session, the author of <i>Student-Centered Coaching</i> (Corwin Press, 2010) provided a framework for coaching teachers that is driven by the belief that if we design coaching around our goals for students, and then work together to reach those goals, coaching becomes more respectful and results-based.	high school principals, superintendents, central office coordinators, instructional facilitators	live stream
11/8/2012	Institute 8 - Updating the Development of the Next Generation Science Standards	This institute consisted of a recording of Dr. Stephen Pruitt addressing the Arkansas Science Teachers Association during the 2012 Arkansas Curriculum Conference	all educators	live stream
11/13/2012	Institute 7 - CTE Assessment System	The Arkansas Department of Career Education, along with PCG Education, presented training on the new CTE Assessment System.	district CTE testing coordinators, CTE co-op coordinators, CTE administrators and teachers	live stream, CIV
11/27/2012	TOT - Linear Measurement: Grades K-3 Part One	This workshop investigated the big ideas behind linear measurement, how children think about these ideas, the developmental trajectory of their thinking, and what this means instructionally.	math specialists, grade level teachers	live stream
11/28/2012	TOT - Linear Measurement: Grades K-3 Part Two	This workshop investigated the big ideas behind linear measurement, how children think about these ideas, the developmental trajectory of their thinking, and what this means instructionally.	math specialists, grade level teachers	live stream
12/11/2012	TOT - Fraction Operations: Partial Groups Grades 4-7 Part One	This session explored the mathematics and strategies for multiplying and dividing fractions in a variety of problem situations.	math specialists, math teachers	live stream
12/12/2012	TOT - Fraction Operations: Partial Groups Grades 4-7 Part Two	This session explored the mathematics and strategies for multiplying and dividing fractions in a variety of problem situations.	math specialists, math teachers	live stream
12/13/2012	English Language Arts 3 - Tri-State Quality Review Rubric for ELA/Literacy	In this session, Dana Breitweiser and Thomas Coy introduced the work of the EQUIP (Educators Evaluating Quality Instruction Products) team including the Tri-State Rubric. Dana Breitweiser examined all components of the Tri-State Quality Review for ELA/literacy and demonstrated how districts can utilize this tool.	ELA specialists, ELA teachers	this was neither and I was the only audience member
12/13/2012	Common Core State Standards Mathematics 9 - Tri-State Quality Review Rubric for Mathematics	In this session, Dana Breitweiser and Thomas Coy introduced the work of the EQUIP (Educators Evaluating Quality Instruction Products) team including the Tri-State Rubric. Thomas Coy examined all components of the Tri-State Quality Review Rubric for Mathematics and demonstrated how districts can utilize this tool.	math specialists, math teachers	this was neither and I was the only audience member

Date	Title	Synopsis	Audience	Delivery Mode
1/14/2013	Common Core State Standards Mathematics 8 - Mathematics Standards in High School Courses	Dr. Linda Griffith, Dr. Tracy Tucker, Thomas Coy, and others discussed the implementation of the math standards in high school courses.	administrators, instructional facilitators, and central office personnel	live stream, CIV
1/8/2013	TOT - Non-geometric Measurement Grades K-5 Part One	This workshop investigated the development of non-geometric measurements in grades K-5, beginning in grade K with describing measurable attribute and extending thru grade 5 with conversions between units	math specialists, grade level teachers	live stream
1/9/2013	TOT - Non-geometric Measurement Grades K-5 Part Two	This workshop investigated the development of non-geometric measurements in grades K-5, beginning in grade K with describing measurable attribute and extending thru grade 5 with conversions between units	math specialists, grade level teachers	live stream
1/29/2013	TOT - Area, Surface Area and Volume Measurement Grades 3-5 Part One	This session focused on the big ideas of area, surface area and volume. We will examine the relationships between the three and how children's thinking evolves related to these big ideas.	math specialists, grade level teachers	live stream
1/30/2013	TOT - Area, Surface Area and Volume Measurement Grades 3-5 Part Two	We will examine the relationships between the three and how children's thinking evolves related to these big ideas.	math specialists, grade level teachers	live stream
2/12/2013	TOT - Developing Proportional Reasoning Grades 4-7 Part One	This session investigated the development of proportional reasoning concepts and skills beginning with multiplicative comparison and relating measurement units in grade 4 to using proportional relationships to solve multi-step problems in grade 7	math specialists, grade level teachers	live stream
2/13/2013	TOT - Developing Proportional Reasoning Grades 4-7 Part Two	This session investigated the development of proportional reasoning concepts and skills beginning with multiplicative comparison and relating measurement units in grade 4 to using proportional relationships to solve multi-step problems in grade 7	math specialists, grade level teachers	live stream
2/15/2013	Institute 9 - PARCC Model Content Frameworks	The purpose of this institute was to help teachers and curriculum directors understand and use the PARCC Model Content Frameworks for ELA/literacy and mathematics.	math specialists, grade level teachers curriculum directors, building administrators, instructional facilitators and classroom teachers	live stream, CIV
3/5/2013	TOT - Numerical Data Grades 2-5 Part One	This workshop focused on students' development of data displays and what the displays show and hide. Students need to collect data in repeated measurement contexts and use that information to make conclusions about the data. This workshop used science as the foundation for data collection and for meaningful analysis.	math specialists, grade level teachers	live stream
3/6/2013	TOT - Numerical Data Grades 2-5 Part Two	This workshop focused on students' development of data displays and what the displays show and hide. Students need to collect data in repeated measurement contexts and use that information to make conclusions about the data. This workshop used science as the foundation for data collection and for meaningful analysis.	math specialists, grade level teachers	live stream
3/26/2013	TOT - Geometric Measurement Grades 6-12 Part One	This session explored the conceptual development of geometric measurements found in grades 6-12 Common Core State Standards for Mathematics.	math specialists, math teachers	live stream
3/27/2013	TOT - Geometric Measurement Grades 6-12 Part Two	This session explored the conceptual development of geometric measurements found in grades 6-12 Common Core State Standards for Mathematics.	math specialists, math teachers	live stream

Date	Title	Synopsis	Audience	Delivery Mode
3/28/2013	TOT - Planning for Instruction under CCSSM: Kindergarten	This professional development facilitated a discussion about developing unit planning and lesson planning. This course focused on the development of algebraic thinking to functional thinking using the multiple algebraic representations: table, graph, equation (with varying quantity represented), and problem situation. Participants considered how to build upon students' use of algebraic properties when using operations to solve various problem situations to foment the use of the multiple representations to examine relationships between paired quantities.	math specialists, grade level teachers	CIV
4/9/2013	TOT - Algebraic Thinking as a Bridge to Functions Grades 3-6 Part One	This course focused on the development of algebraic thinking to functional thinking using the multiple algebraic representations: table, graph, equation (with varying quantity represented), and problem situation. Participants considered how to build upon students' use of algebraic properties when using operations to solve various problem situations to foment the use of the multiple representations to examine relationships between paired quantities.	math specialists, math teachers	live stream
4/10/2013	TOT - Algebraic Thinking as a Bridge to Functions Grades 3-6 Part Two	This workshop investigated the development of geometric thinking around big ideas and essential understandings from the book <i>Developing Essential Understanding of Geometry: Grades 6-8</i> from NCTM.	math specialists, math teachers	live stream
4/23/2013	TOT - Geometry Grades 5-12 Part One	This workshop investigated the development of geometric thinking around big ideas and essential understandings from the book <i>Developing Essential Understanding of Geometry: Grades 6-8</i> from NCTM.	math specialists, math teachers	live stream
4/24/2013	TOT - Geometry Grades 5-12 Part One	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
4/29/2013	TOT - Angles, Coordinate Grids and Scale Grades 3 - 5 Part One	This course focused on making sense of the different interpretations of angle with emphasis on angle as the degree of turn.	math specialists, grade level teachers	live stream
4/30/2013	TOT - Angles, Coordinate Grids and Scale Grades 3 - 5 Part Two	This course focused on making sense of the different interpretations of angle with emphasis on angle as the degree of turn.	math specialists, grade level teachers	live stream
5/1/2013	TOT - Planning for Instruction under CCSSM: 2nd Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/3/2013	TOT - Planning for Instruction under CCSSM: 3rd Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/6/2013	TOT - Planning for Instruction under CCSSM: 4th Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/9/2013	TOT - Planning for Instruction under CCSSM: 5th Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/28/2013	TOT - Planning for Instruction under CCSSM: 5th Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/29/2013	TOT - Planning for Instruction under CCSSM: 6th Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/30/2013	TOT - Planning for Instruction under CCSSM: 7th Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV
5/31/2013	TOT - Planning for Instruction under CCSSM: 8th Grade	This professional development facilitated a discussion about developing unit planning and lesson planning.	math specialists, grade level teachers	CIV

Date	Title	Synopsis	Audience	Delivery Mode
6/3/2013	Common Core State Standards Mathematics 10 - High School Mathematics Courses: Algebra I	This session provided a vision for Geometry, model exemplary practices, tips for transitioning to the new course and any applicable PARCC assessments, and suggested next steps for educators.	junior high and high school educators and administrators	CIV
6/4/2013	Common Core State Standards Mathematics 11 - High School Mathematics Courses: Geometry	This session provided a vision for Algebra II, model exemplary practices, tips for transitioning to the new course and any applicable PARCC assessments, and suggested next steps for educators.	junior high and high school educators and administrators	CIV
6/5/2013	Common Core State Standards Mathematics 12 - High School Mathematics Courses: Algebra II	This session provided a vision for the course, model exemplary practices, tips for transitioning to the new course and any applicable PARCC assessments, and suggested next steps for educators.	junior high and high school educators and administrators	CIV
6/6/2013	Common Core State Standards Mathematics 13 - High School Mathematics Courses: 4th Credit Courses	This session provided a vision for the courses, model exemplary practices, tips for transitioning to the new course and any applicable PARCC assessments, and suggested next steps for educators.	junior high and high school educators and administrators	CIV
6/7/2013	Common Core State Standards Mathematics 14 - High School Mathematics Courses: Bridge to Algebra II	This session provided a vision for Bridge to Algebra II, model exemplary practices, tips for transitioning to the new course and any applicable PARCC assessments, and suggested next steps for educators.	junior high and high school educators and administrators	CIV
7/9/2013	Institute 10 - Special Education Standards-Based IEPs	This institute focused on developing Individualized Education Plans for students with disabilities based on the CCSS.	Special Education Teachers	CIV

