

ELA and Math Subcommittee Update on Working Group Progress

Arizona's English Language Arts and
Mathematics Standards Review
February 4, 2016

Process Timeline and Progress To Date

DATES	ACTION
August 3, 2015	ASDC Meets
September 17, 2015	Public Review Begins
October 22, 2015	Initial date given for close of public review (important for contextual purposes)
November 2, 2015	First Subcommittee Meeting held for ELA and Math
November 13, 2015	First ELA Working Group Meeting
November 20, 2015	First Math Working Group Meeting
November 22, 2015	Public Review concluded
December 8, 2015	Second Math Working Group Meeting
December 11, 2015	Second ELA Working Group Meeting
January 20, 2016	Third Math Working Group Meeting
January 20, 2016	Second Math Subcommittee Meeting
January 21, 2016	Third ELA Working Group Meeting
January 21, 2016	Second ELA Subcommittee Meeting

September 17, 2015:

Public Feedback Process

- ▶ **Collected September 17th – November 22nd:**
 - A website survey developed by the Arizona State Board of Education
 - 15 public hearings held across Arizona:

1. Prescott	9. Peoria
2. Tucson	10. Parker
3. Chandler	11. Safford
4. San Tan Valley	12. Yuma
5. Show Low	13. Nogales
6. Flagstaff	14. Phoenix
7. Sierra Vista	15. Globe
8. Kingman	

Subcommittee Meeting #1

ELA and Math – Joint Meeting
November 2, 2015

November 2, 2015

1st Subcommittee Meeting

Purpose of Initial Joint Subcommittee Meeting:

1. Overview of the Standards Development Process
2. Overview of Open Meeting Law
3. Overview of Robert's Rules of Order
4. Selection of a Subcommittee Chair and Vice-Chair for Math and for ELA
 - Math Subcommittee Chair = Janice Mak
 - Math Subcommittee Vice-Chair = Cheryl Johnson
 - ELA Subcommittee Chair = Rachel Stafford
 - ELA Subcommittee Vice-Chair = James Blasingame

1st Working Group Meetings

ELA – November 13, 2015

Math – November 20, 2015

November, 2015:

1st ELA and Math Working Group Meetings

Dates of First Working Group Meetings:

1. English Language Arts (ELA) – November 13, 2015
2. Mathematics – November 20, 2015


Structure/Outline/Goals:

- ▶ The structure, outline, and goals for the ELA and Mathematics working group meetings were consistent with one another.

November, 2015:

1st ELA and Math Working Group Meetings

Outline of the Meetings:

1. Understand the standards development process and its structure including:
 - Executive Order issued to SBE by Governor Ducey
 - 17 member Arizona Standards Development Committee
 - 14 or 15 member ELA or Mathematics Subcommittee
 - ELA and Mathematics standards review working groups
 2. Establish/understand working group norms
 3. Review definitions of standards, curriculum, and instruction for consistency
 4. Understand the role of a working group member
 5. Understand the goals for the day
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November, 2015:

1st ELA and Math Working Group Meetings

Goals for Working Group Meeting #1:

1. Review public feedback to determine large categories in which comments could be placed.
 - Initially done within grade level banded rooms (K-4, 5-8, 9-12 + higher education)
 - Consensus of categories was established across grade levels
2. Categorize comments
 - Grade level working groups began sorting comments into established categories to assist future working group conversation.

ELA Working Group Meeting 1

November 13, 2015

November 13, 2015

ELA Working Group Meeting #1

- ▶ **46 educators participated in the first working group meeting**
- ▶ **Agreed upon common categories for comments across ELA working groups:**
 - Structure of Standards
 - Implementation of Standards
 - Developmentally Appropriate/Rigor
 - Assessment
 - General Perceptions and Concerns
 - General Support
 - Grade Level Additions/Deletions/Changes
 - Other

Math Working Group Meeting 1

November 20, 2015

November 20, 2015

Math Working Group Meeting #1

- ▶ **51 educators participated in the first working group meeting**
- ▶ **Agreed upon common categories for comments across math working groups:**
 - Instruction
 - Curriculum
 - Implementation
 - General Perceptions and Concerns
 - General Support
 - Standards for Mathematical Practices
 - College and Career Readiness
 - Assessment
 - Equity
 - Instructional Shifts (Focus/Coherence/Rigor)
 - Advanced Math


Public Feedback from SBE Website

Closed November 22, 2015

November 22, 2015

Public Feedback Concluded

▶ Feedback Results:

- ELA standards received 1,034 comments
 - Math standards received 1,084 comments
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- ▶ Comments were received from a variety of roles including parents, teachers, school and district administrators, community members, students, and higher education professionals.
 - ▶ Comments were received from all regions of Arizona, representing a diverse perspective.
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2nd Working Group Meetings

Math – December 8, 2015

ELA – December 11, 2015

December, 2015

2nd ELA and Math Working Group Meetings

Dates of Second Working Group Meetings:

1. Mathematics – December 8, 2015
2. English Language Arts (ELA) – December 11, 2015

Structure/Outline/Goals:

- ▶ The structure, outline, and goals for the ELA and Mathematics working group meetings were consistent with one another.

December, 2015

2nd ELA and Math Working Group Meetings

Outline of Meetings:

1. Understand the standards development process, its structure, and the role of a working group member.
 - This information is reiterated at each working group meeting as there are new members joining the process.
2. Revisit working group norms.
3. Review definitions of standards, curriculum, and instruction for consistency
4. ***Continuation of work from November meeting.***

December, 2015

2nd ELA and Math Working Group Meetings

Goals for Working Group Meeting 2:

1. Review common categories established from workgroup meeting #1.
2. Finish categorizing public comments
 - All public comments were available for December meeting:
 - General (non-grade level specific) comments were split across grade levels
 - Grade-level specific comments were reviewed by grade level working group teams
 - Any additional category needs were agreed upon through a consensus process across grade levels

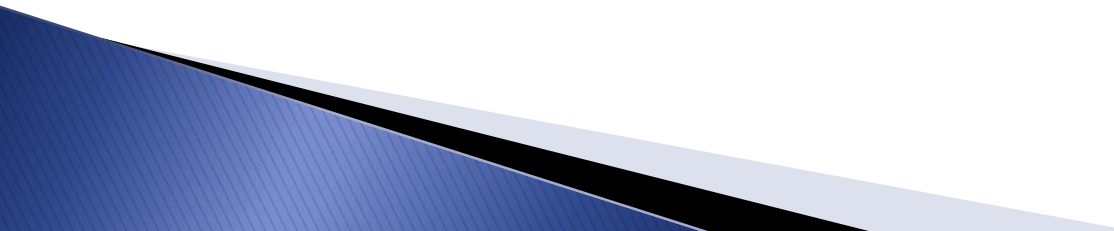
Math Working Group Meeting 2

December 8, 2015

December 8, 2015

Math Working Group Meeting #2

Additional Information for Math Working Group:

1. 36 educators participated in the second math working group meeting.
 - This meeting served as a continuation of work from November.
 - 19% of participants were new members to the process allowing for consistency of task while providing opportunity for fresh perspectives to be shared.
 2. Instructional Shifts were identified by the working groups as a broad category at the first working group meeting.
 - Common definitions were shared and discussed for consistency of categorization.
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December 8, 2015

Math Working Group Meeting #2

Additional Information for Math Working Group:

1. Math working groups began with “general comments” at the first meeting and focused more on “grade-level specific” comments at the second meeting.
 - Grade level groups were provided the latitude to create additional categories for content specific comments, if needed.
 - Examples include: “Fluency,” and “Missing Content” categories at some grade levels.
2. Status of comment categorization:
 - At the conclusion of this meeting, the bulk of comments had been assigned categories.
 - Any unfinished categorization tasks would roll over to the January meeting.

ELA Working Group Meeting 2

December 11, 2015

December 11, 2015

ELA Working Group Meeting #2

Additional Information for Math Working Group:

1. 43 educators participated in the second ELA working group meeting.
 - This meeting served as a continuation of work from November.
 - 23% of participants were new members to the process allowing for consistency of task while providing opportunity for fresh perspectives to be shared.
2. ELA Working Groups began with “grade level specific” comments at the first meeting and focused more on “general” and “anchor standard” comments at the second meeting.
3. Status of Comment Categorization:
 - At the conclusion of this meeting, the bulk of comments had been assigned categories.

3rd Working Group Meetings

Math – January 20, 2016

ELA – January 21, 2016

January, 2016

3rd ELA and Math Working Group Meetings

Dates of Third Working Group Meetings:

1. Mathematics – January 20, 2016
2. English Language Arts (ELA) – January 21, 2016

Structure/Outline/Goals:

- ▶ The structure, outline, and goals for the ELA and Mathematics working group meetings were consistent with one another.

January, 2016

3rd ELA and Math Working Group Meetings

Outline of Meetings:

1. Understand the standards development process, its structure, and the role of a working group member.
 - This information is reiterated at each working group meeting as there are new members joining the process.
2. Revisit working group norms.
3. Review work completed to date (categorization)
4. Review definitions of standards, curriculum, and instruction for consistency
5. ***Review definitions of standards vs. performance objectives***
6. ***Discussion and consensus regarding the purpose of standards***
7. ***Review and consensus of Arizona Standards Revision and Refinement Criteria***
8. ***Begin “next steps” using categorized comments***

Standards versus Performance Objectives

Standards are what students need to know, understand, and be able to do **by** the end of each grade level. Standards build across grade levels in a progression of increasing understanding and through a range of cognitive demand levels.

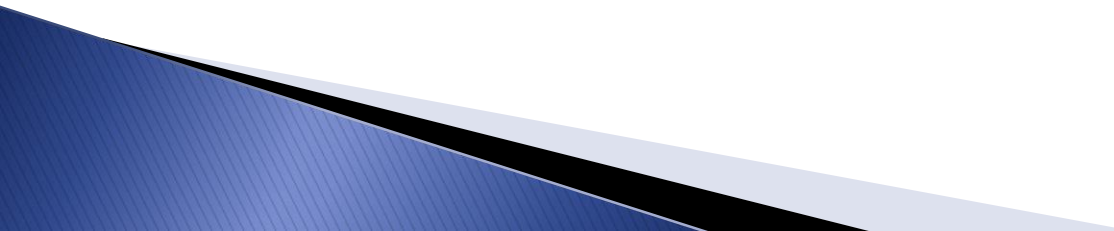
Content Standards

Performance Objectives are **incremental steps** toward mastery of individual content standards. Performance Objectives are knowledge and skills that a student must demonstrate at each grade level. Performance objectives do not imply a progression of learning and, because they are discrete skills, reach a limited level of cognitive demand.

Performance Objectives

Purpose of Standards

The Arizona State Standards define the knowledge, understanding and skills that need to be effectively taught and learned for ***all*** students to be ready to succeed academically in credit-bearing, college-entry courses and/or in workforce programs.



Arizona Standards Revision and Refinement Criteria

The following criteria will help to guide the Arizona Standards development workgroups in setting a draft of the Arizona Mathematics and ELA Standards.

Goal:

The standards as a whole must be essential, rigorous, focused, coherent, and based in research.

Essential:

The standards must be reasonable in scope in defining the knowledge, understanding, and what students should be able to do to succeed in entry-level, credit-bearing, academic college courses and/or in workforce training programs.

Rigorous:

The standards will include a well-balanced range of cognitive demands, including asking students to demonstrate deep conceptual understanding through the application of content knowledge and skills to new situations.

High-level cognitive demand includes reasoning, justification, synthesis, and analysis.



Arizona Standards Revision and Refinement Criteria

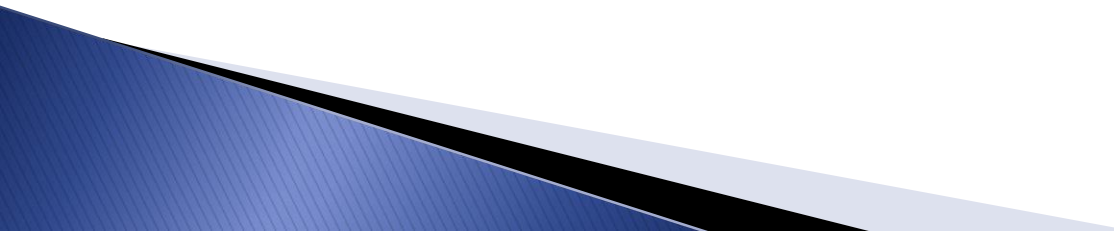
Focused:

The standards should provide sufficient guidance and clarity so that they are teachable, learnable, and measurable. The standards should maintain a relatively consistent level of grain size.

- ▶ **Teachable and learnable:** The standards must be reasonable in scope, grade-level appropriate, and instructionally manageable, while promoting depth of understanding. They guide the design of curricula and instructional materials at a local level.
- ▶ The standards allow teachers and students the flexibility to teach and learn in various instructionally relevant contexts.
- ▶ **Measurable:** Student progression towards mastery of the standards should be observable and verifiable. Standards can be used to develop a variety of assessments.

Coherent:

The standards should convey a unified vision of the big ideas, supporting concepts/clusters, and progression of learning within and across grade levels.

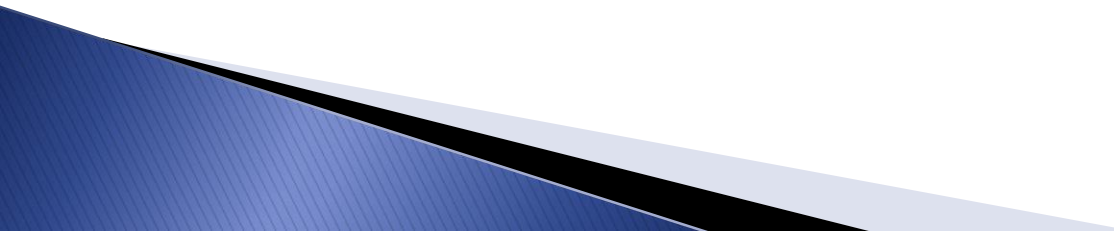


January, 2016

3rd ELA and Math Working Group Meetings

Goals for Working Group Meeting 3:

Review and Refinement of Standards:

1. Finish categorizing general and grade level specific public comments.
 2. Begin the process of reviewing and refining current Arizona standards based on public comments, research, other state standards, professional knowledge of content, and grade level expertise.
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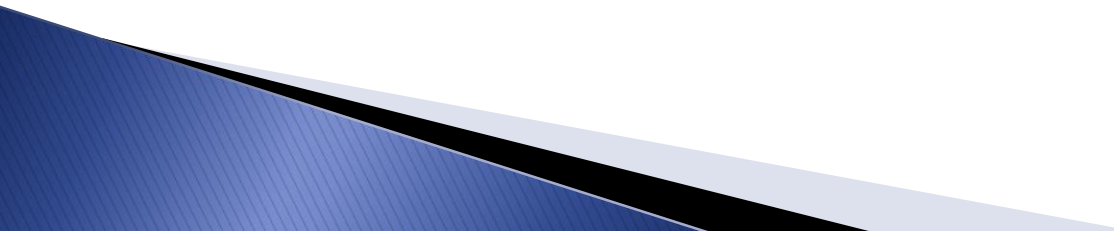
Math Working Group Meeting 3

January 20, 2016

January, 20, 2016

Math Working Group Meeting #3

Additional Information for Math Working Group:

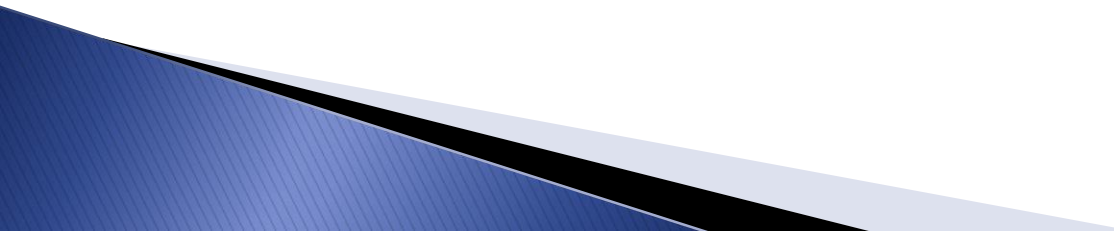
1. 47 educators participated in the third math working group meeting.
 - 41% of participants were new members to the process. This allowed for consistency of task while providing opportunity for fresh perspectives to be shared.
 2. To date, 78 educators (K-12 or Higher Education) have participated in the process for Mathematics.
 3. Participants thus far in the process for mathematics have represented 8 counties.
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January, 20, 2016

Math Working Group Meeting #3

Resources Provided in Rooms for Working Group Members:

Research and Data:

- ▶ Math Panel Report- 2008
 - ▶ NAEP- 2013- Mathematics Framework for the 2013 NAEP (NAEP – National Assessment of Educational Progress)
 - ▶ PISA- 2012 Mathematics Framework (PISA- Program for International Student Assessment)
 - ▶ PISA- 2015 Draft Collaborative Problem Solving Framework
 - ▶ PISA -2015 Draft Mathematics Framework
 - ▶ ACT- College and Career Ready Standards – Mathematics, Information about the ACT CCRS, 2014 The Condition of College and Career Readiness ACT Report
 - ▶ SAT- College board Standards for College Success- Mathematics & Statistics
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January, 20, 2016

Math Working Group Meeting #3

Resources Provided in Rooms for Working Group Members:

Arizona and other State Standards and Documents:

- ▶ ADE – High School Course Content Guidance Documents
- ▶ ADE- K-8 Grade level content guidance documents
- ▶ 2010 Arizona Mathematics Standards – Placemat Documents
- ▶ 2008 Arizona Mathematics Standards with Explanations and examples
- ▶ Massachusetts Curriculum Framework for Mathematics, March 2011
- ▶ Department of Defense Mathematics Standards – Grades K-5- 2014, Grades 6-12 2000
- ▶ California Common Core State Standards- Mathematics – August 2010 modified January 2013
- ▶ Alaska Mathematics Standards, June 2012
- ▶ Nebraska Mathematics Standards, September 2015
- ▶ Common Core State Standards – Mathematics- 2009
- ▶ Indiana Academic Standards- Mathematics, June, 2014
- ▶ Progressions for the Common Core State Standards in Mathematics- Domain specific content support documents

January, 20, 2016

Math Working Group Meeting #3

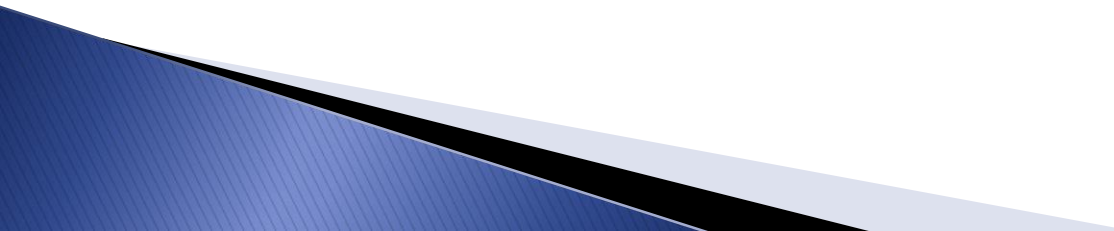
Other Math Texts for Reference:

- ▶ *Principles and Standards for School Mathematics*
- ▶ *Research Companion for Principles and Standards for School Mathematics*
- ▶ *How Students Learn Mathematics in the Classroom – NRC*
- ▶ *Helping Children Learn Mathematics – NRC*
- ▶ *Curriculum Focal Points for Pre-K to Grade 8*
- ▶ *Teaching Student-Centered Mathematics K-3*
- ▶ *Teaching Student-Centered Mathematics 3-5*
- ▶ *Teaching Student-Centered Mathematics 5-8*
- ▶ *Building Powerful Numeracy for Middle & High School Students*
- ▶ *Focus in High School Mathematics*
- ▶ *Putting Research into Practice in Elementary Grades*
- ▶ *Children's Mathematics – Cognitively Guided Instruction*

Math Subcommittee Meeting 2

January 20, 2016

Math Subcommittee Meeting 2

- ▶ During this meeting, participants shared:
 - Questions about the structure of the process
 - Questions regarding their role as subcommittee and working group members
 - Progress and thoughts regarding the work to date
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ELA Working Group Meeting 3

January 21, 2016

January, 21, 2016

ELA Working Group Meeting #3

Additional Information for ELA Working Group:

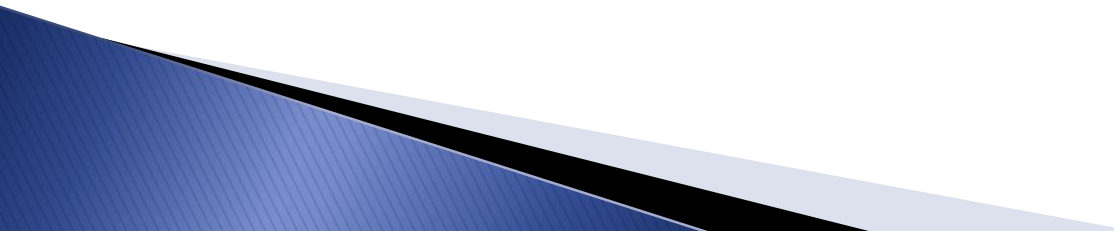
1. 44 educators participated in the third ELA working group meeting.
 - 16% of participants were new members to the process. This allowed for consistency of task while providing opportunity for fresh perspectives to be shared.
2. To date, 63 educators (K-12 or Higher Education) have participated in the process for English Language Arts.
3. Participants thus far in the process for ELA have represented 7 counties.

January, 21, 2016

ELA Working Group Meeting #3

Resources Provided in Rooms for Working Group Members:

Research and Data:

- ▶ Advanced Placement: Arizona 2014 Data
 - ▶ SAT: Arizona 2014 Data
 - ▶ ACT: Arizona 2014 Data
 - ▶ PISA (Program for International Student Assessment) 2012 Data
 - ▶ PIRLS (Progress in International Reading Literacy Study) 2011 Data
 - ▶ National Reading Panel: Introduction and Findings
 - ▶ Test Specifications for the Redesigned SAT
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January, 21, 2016

ELA Working Group Meeting #3

Resources Provided in Rooms for Working Group Members:

Arizona and other State Standards and Documents:

- ▶ Arizona's English Language Arts Standards
- ▶ Massachusetts 2001 English Language Arts Curriculum Framework
- ▶ Indiana Academic Standards: ELA (K-12)
- ▶ Alaska English/Language Arts Standards (K-12)
- ▶ National Council of Teachers of English/International Reading Association Standards for the English Language Arts
- ▶ College Board Standards for College Success (*Included in grades 6-12)
- ▶ Department of Defense 2009 English Language Arts Standards
- ▶ California Standards for English Language Arts
- ▶ Example Cursive Standards (North Carolina, Tennessee, Florida, and Indiana) (*Included in grades K-5)
- ▶ English Language Arts Standard Progressions by Strand: Reading, Writing, Language, and Speaking & Listening
- ▶ K-5 Reading Foundational Skills – Appendix A pp. 17-22 (*Included in grades K-5)
- ▶ Written Language Foundations – Moats & Adams (*Included in grades K-5)

January, 21, 2016

ELA Working Group Meeting #3

Resources Provided in Rooms for Working Group Members:

Other ELA Texts for Reference:

- ▶ *Report of the National Reading Panel: Teaching Children To Read**
- ▶ *The Voice of Evidence in Reading Research**
- ▶ *The Fluent Reader*
- ▶ *Reading & Writing Informational Text in the Primary Grades*
- ▶ *Unlocking Literacy: Effective Decoding & Spelling Instruction**
- ▶ *Best Practices in Writing Instruction*
- ▶ *Multisensory Teaching of Basic Language Skills**
- ▶ *Handbook of Language and Literacy**
- ▶ *Research-Based Methods of Reading Instruction Grades K-3**
- ▶ *Fundamentals of Literacy Instruction & Assessment PK-6 and 6-12**
- ▶ *Handbook of Research on Reading Comprehension*
- ▶ *Text Complexity: Raising Rigor in Reading*

* denotes texts with specific
reference to phonics information

January, 21, 2016

ELA Working Group Meeting #3

Resources Provided in Rooms for Working Group Members:

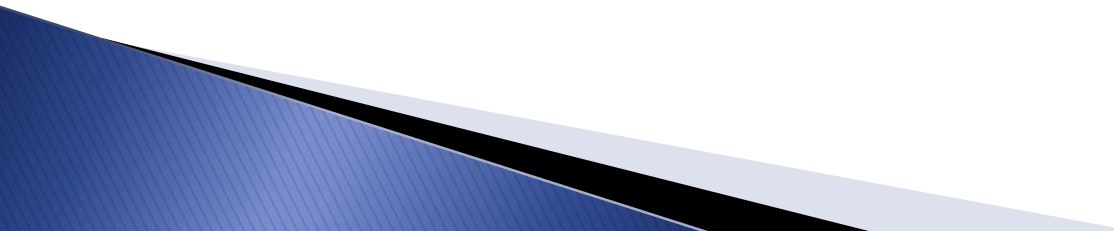
Other ELA Texts Reference:

- ▶ *Energize Research Reading & Writing*
- ▶ *Reading Nonfiction*
- ▶ *Bringing Words to Life*
- ▶ *Reading for Understanding*
- ▶ *Critical Thinking, Reading, and Writing: A Brief Guide to Argument*
- ▶ *Teaching Language: From Grammar to Grammmaring*
- ▶ *Teaching Reading & Writing: Improving Instruction & Student Achievement*
- ▶ *Write Like This: Teaching Real-World Writing Through Modeling & Mentor Text*
- ▶ *Rhetorical Grammar: Grammatical Choices, Rhetorical Effects*
- ▶ *Revising the Rules: Traditional Grammar and Modern Linguistics*
- ▶ *Grammar to Enrich & Enhance Writing*
- ▶ *Writing with Mentors*

ELA Subcommittee Meeting 2

January 21, 2016

ELA Subcommittee Meeting 2

- ▶ During this meeting, participants shared:
 - Questions about the structure of the process
 - Questions regarding their role as subcommittee and working group members
 - Progress and thoughts regarding the work to date
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Thank You