memorandum

Date: June 2013

To: Nevada Department of Education

From: REL West Reference Desk Team

Re: Summary of research/resources on instructional materials aligned to the Common Core

The following document provides information about open/free sources on curricula and instructional materials aligned with the Common Core.
The information is organized as an annotated bibliography in the following categories:

1. Policy-Oriented Briefs and Articles (to provide context)
2. Open Source and Technology-Based Materials
3. Additional Resources (Websites)

Resources

1. Policy-Oriented Briefs and Articles

Chingos, M., & Whitehurst, G. J. (2012). *Choosing blindly: Instructional materials, teacher effectiveness, and the Common Core.* Brown Center on Education Policy at Brookings. Retrieved on June 12, 2013, from http://www.brookings.edu/research/reports/2012/04/10-curriculum-chingos-whitehurst

Excerpt: The authors argue that if the investment in the Common Core is going to pay off, an empirical link between standards and instructional materials must be provided. They claim that if we do not even know what instructional materials students are using, we will be completely in the dark and unable to discern that the Common Core standards are working in some places and not others in interaction with the materials that are deployed and characteristics of teachers. As a result, they encourage states, with support from the federal government and philanthropic organizations, to collect systematic information on which materials are being used in which schools. The following are highlights from their recommendations:

- State education agencies should collect data from districts on the instructional materials in use in their schools. The collection of comprehensive and accurate data will require states to survey districts, and in some cases districts may need to survey their schools. In the near term, many states can quickly glean useful information by requesting purchasing reports from their districts' finance offices. Building on these

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initial efforts, states should look to initiate future efforts to survey teachers, albeit on a more limited basis.

- The federal government's National Center for Education Statistics should aid states in this effort by developing data collection templates for them to use through its Common Education Data Standards (CEDS), and providing guidance on how states can use and share data on instructional materials.
- Organizations with an interest in education reform should support this effort. For example, the National Governors Association (NGA) and Council of Chief State School Officers (CCSSO) have put their reputations on the line by sponsoring the Common Core State Standards Initiative. Research based on current and past state standards indicates that this initiative is unlikely to have much of an effect on student achievement in and of itself.
- The Data Quality Campaign (DQC) should use its influence in this area to encourage states to collect information on the use of instructional materials and support them in their efforts to gather these data. The DQC should also help states use the data once they have been collected.
- Philanthropic organizations such as the Bill and Melinda Gates Foundation and the Lumina Foundation for Education could have a major impact by providing the start-up funding needed to collect data on instructional materials and support the research that would put those data to use.

Swanson, M., & Parrott, M. (2013). *Linking literacy and mathematics: The support for Common Core Standards for mathematical practice*. Retrieved on June 12, 2013, from http://www.eric.ed.gov/PDFS/ED539526.pdf

Abstract: In a new era of Common Core State Standards (CCSS), teachers are expected to provide more rigorous, coherent, and focused curriculum at every grade level. To respond to the call for higher expectations across the curriculum and certainly within reading, writing, and mathematics, educators should work closely together to create mathematically proficient students who actively look for relevance and purpose, think critically, and question when uncertain. Mathematics literacy experiences during the elementary school years provide a powerful opportunity to interject context students must know and deeply understand. As described by the Standards for Mathematical Practice, Common Core State Standards suggest teachers not only focus on content but also on process. Historically less attention has been given to the process than the content itself.

Given the importance of these standards and the focus on process, this article proposes children's books and other literacy materials to be used by practitioners to enhance the purpose of each of the eight Standards for Mathematical Practice. These standards include: 1. Make sense of problems and persevere in solving them; 2. Reason abstractly and quantitatively; 3. Construct viable arguments and critique the reasoning of others; 4. Model with mathematics; 5. Use appropriate tools strategically; 6. Attend to precision; 7. Look for and make use of structure; and 8. Look for and express regularity in repeated reasoning. The many literacy resources included in this article have been thoughtfully selected from an extensive literature review of resources recognized for their potential to support the Standards for Mathematical Practice. As described by the CCSS framework, practitioners must provide experiences to encompass not only Standards for Mathematical Content but also Standards for Mathematical Practice. These critical eight practices provide the foundation upon which mathematics content must be accessed and embraced by students. Knowing different ways in which literacy materials can be used to support mathematics is a good starting point and having a list of

classroom-ready resources becomes the catalyst by which teachers of elementary students begin to address the call for higher expectations in mathematics. The instructional implications of CCSS call for teachers to challenge students to think and reason in mathematics and to communicate to others by using literacy resources. The success of Common Core State Standards (CCSS) for Mathematics depends more on how practitioners teach than on what they teach. Elementary school educators must become aware of more and better ways to support the process by which students embrace the mathematics they are required to know.

Wiener, R. (2013). *Teaching to the Core: Integrating implementation of Common Core and teacher effectiveness policies.* The Aspen Institute. Retrieved on June 12, 2013, from http://www.aspeninstitute.org/publications/teaching-core-integrating-implementation-common-core-teacher-effectiveness-policies

Abstract: To strengthen state implementation of Common Core State Standards and meaningful teacher evaluations, the Aspen Institute and the Council of Chief State School Officers (CCSSO) in this policy brief suggest ten actions to move beyond simply alignment of two ambitious reforms— teacher evaluation and the Common Core—to integrate them into a system-level whole. To do that, author and Aspen Education Program Executive Director Ross Wiener describes the linkages between implementation of Common Core and teacher effectiveness policies and offers practical suggestions to state leaders on how to ensure teachers are using strategies that engage students in learning at high levels.

2. Open Source and Technology-Based Materials

ASCD's Common Core Resources
http://educore.ascd.org
From the website: This website was funded by the Bill & Melinda Gates Foundation as part of a three-year grant to provide both teachers and school leaders with specific information about the Common Core State Standards and to develop and deliver technical assistance for the successful implementation of the standards at the district, school, and classroom levels.

Literacy Tools
http://educore.ascd.org/channels/c8920746-9ae8-49bf-bae3-f8b6cac46173
From the website: Understand the framework, learn how to use the models, and view sample units based on the templates created by the Literacy Design Collaborative (LDC).

Math Tools
http://educore.ascd.org/channels/3B6BC7EC-3F01-499A-85CA-F000E7BB2D56
From the website: Classroom Challenges, developed through the Mathematics Assessment Project (MAP) by the Mathematics Assessment Resource Service (MARS), include both problem-solving and content development formative assessment lessons. Learn more about Classroom Challenges and the Mathematics Design Collaborative (MDC) in this section.

Charles A. Dana Center: The Mathematics Common Core Toolbox
http://www.ccsstoolbox.org/
From the website: This site is a resource designed to support districts working to meet the challenge and the opportunity of the new standards. Here you will find tools and instructional materials that help you to better understand and to implement the CCSSM. This site has been created through a collaboration of the Charles A. Dana Center at the University of Texas at Austin and Agile Mind with

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partial funding from the Bill & Melinda Gates Foundation. Some of the included materials have been adapted from the efforts of researchers and practitioners.

Comprehensive Course Program
http://www.utdanacenter.org/pre-kindergarten-12-education/tools-for-teaching-and-learning/comprehensive-course-programs/
From the website: With publisher Agile Mind, we provide comprehensive CCSS-aligned mathematics programs for teachers and students from middle school through high school.

Early Mathematics—A Resource for Teaching Young Children (2012)
http://www.utdanacenter.org/pre-kindergarten-12-education/common-core-state-standards/early-mathematics-a-resource-for-teaching-young-children-2012/
From the website: With generous support from the Noyce Foundation, we have developed *Early Mathematics—A resource for teaching young children*, which consists of CCSSM-aligned materials for 20 sessions for each of four early grades: prekindergarten, kindergarten, grade 1, and grade 2. … Previously, the four grades were organized in one volume; they are now offered as individual books.

The Common Core Conversation in Edmodo
http://www.commoncoreconversation.com/
From the website: Welcome to the Common Core Conversation, your place for free resources, lessons, and teaching strategies.
REL West summary: Edmodo, utilizing a design similar to Facebook, provides teachers and students a secure place to connect, collaborate, and share content. A nationwide Edmodo social media group, the Common Core Conversation, has more than 1,000 educator members. A Lesson-Athon was hosted in August 2012, with the goal of collecting 31 lessons in 31 days that integrate the CCSS in various content areas and grade levels. This "swap shop" activity has been going on among the participants ever since. This media group meets virtually in Edmodo: http://www.edmodo.com/, using group code gy48aa, where registered educators can learn about colleagues' practices and incorporate in their classrooms.

Council of Great City Schools: Common Core Works
http://www.commoncoreworks.org/domain/105
From the website: The Council of the Great City Schools has designed this Common Core Works website to provide member districts quick access to reliable information, tools, and resources for implementing the Common Core State Standards (CCSS) in English Language Arts/Literacy and Mathematics, and the Next Generation Science Standards.

English Language Arts
http://www.commoncoreworks.org/domain/113
From the website: Each of these exemplars, produced by Student Achievement Partners, features the following: reading tasks in which students are asked to read and reread passages and respond to a series of text-dependent questions; vocabulary and syntax tasks which linger over noteworthy or challenging words and phrases; discussion tasks in which students are prompted to use text evidence and refine their thinking; and writing tasks that assess student understanding of the text. We encourage teachers to take these exemplars and modify them to suit the needs of their students.

Fisher and Frey Video Channel
http://www.fisherandfrey.com/?p=774

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REL West summary: Nancy Frey and Douglas Fisher, two professors in the School of Teacher Education at San Diego State University, created this website providing resources and recommendations to help educators build literacy-rich schools for children. There are various videos on professional development regarding the Common Core, including teacher modeling applying the CCSS in geometry, reading, history, and physics.

Illustrative Mathematics
http://illustrativemathematics.org/
From the website: Illustrative Mathematics provides guidance to states, assessment consortia, testing companies, and curriculum developers by illustrating the range and types of mathematical work that students experience in a faithful implementation of the Common Core State Standards, and by publishing other tools that support implementation of the standards.
REL West note: Specifically, the section on K-8 content standards with illustrations is noteworthy (http://illustrativemathematics.org/standards/k8).

Inside Mathematics
http://www.insidemathematics.org/
From the website: Inside Mathematics provides a resource for educators who struggle to provide the best mathematics instruction they can for their students. Resources include demonstration lessons, mathematics learning tools, and resources to support classroom teachers, coaches, and administrators' daily practices. Inside Mathematics has aligned the tasks and assessment resources with the Common Core State Standards for Mathematical Content. In this site, one can make use of these standards through searching by grade level as well as by progression.
http://insidemathematics.org/index.php/mathematical-content-standards

MyGroupGenius
http://www.mygroupgenius.org
From the website: MyGroupGenius, an initiative of the Bill & Melinda Gates Foundation, lets teachers share tools, craft lessons, and build communities of like-minded peers. If you're a professional educator or anyone else invested in the successful and thoughtful implementation of Common Core Standards, we invite you to join us. Inside, you'll find teaching tools and assignments in a wide range of subjects, from geometry and trigonometry to history and English. Join networks of educators—local and national—to share ideas, refine assignments, and troubleshoot problems. It's all here to help you discover fresh ways to ensure that your students learn.

> **Mathematics Design Collaborative (MDC)**
> http://www.mygroupgenius.org/mathematics/
> *From the website:* The Mathematics Design Collaborative (MDC) is a group of curriculum designers, assessment developers, professional learning specialists, and district and school networks. Central to MDC are sets of Formative Assessment Lessons (FALs). Each set is aligned to the Common Core and is designed to sit within CCSS-aligned courses of study. The FALs represent a major innovation in teaching and learning mathematics. Their hybrid model of assessment and instruction is designed for medium-cycle formative assessment, the type that teachers can use every two weeks.
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> **Literacy Design Collaborative (LDC)**
> http://www.mygroupgenius.org/literacy
> *From the website:* The Literacy Design Collaborative [LDC] offers a fresh approach to incorporating literacy into middle and high school content areas. Designed to make literacy instruction the foundation of the core subjects, LDC allows teachers to build content on top

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of a coherent approach to literacy. This is drastically different than past, less structured notions of "adding" reading and writing when possible to the teaching of content.

The National Council of Teachers of English (NCTE)
http://www.ncte.org
From the website: NCTE offers books, online courses and events, journal articles, and more to support teachers' focus on keeping students at the center of instruction. They also provide videos featuring educators sharing their insights on how to frame instruction, keep teachers as decision-makers, and put students at the center of learning while planning for the Common Core.
http://www.ncte.org/standards/commoncore

The NCTE series of virtual conference recordings and books explore how student-centered teaching remains crucial to every classroom and provides examples of upholding NCTE principles of effective teaching in a time of Core standards. The recordings, ideal for groups or individuals, include authentic and practical advice from national literacy leaders and classroom teachers who work in real classrooms with real students.

Each grade-level conference includes four, 60-minute session recordings (and handouts) on:

- Interpreting the Common Core State Standards
- Maintaining a student-centric classroom while planning lessons and units of study
- Connecting the inspiring instruction already in your classroom to the CCSS
- Keeping teacher decision-making in the classroom

The National Council of Teachers of Mathematics (NCTM) – Core Math Tools Home
http://www.nctm.org/resources/content.aspx?id=32702
From the website: Core Math Tools is a downloadable suite of interactive software tools for algebra and functions, geometry and trigonometry, and statistics and probability. The tools are appropriate for use with any high school mathematics curriculum and compatible with the Common Core State Standards for Mathematics in terms of content and mathematical practices.

Share My Lesson
http://www.sharemylesson.com
From the website: Share My Lesson was developed by the American Federation of Teachers and TES Connect, with the aim of building the largest online community for U.S. teachers to collaborate and share teaching resources and innovative ideas. This site is a free teaching resources website with over 256,000 resources. There is a significant emphasis on resources to guide teachers on implementing the new Common Core, covering all the aspects of the standards.

The Shell Centre for Mathematical Education Publications Ltd.
http://www.mathshell.com
From the website: The Shell Centre is known around the world for its innovative work on mathematics education. The Shell Centre team has a wide range of ongoing activities including design, development, and research. Shell Centre Publications Ltd. was set up to distribute and license materials developed at the Centre, and offers a range of innovative teaching materials for mathematics education, together with research publications and tests from the Centre and its collaborators. Mathematics Assessment Project (MAP) is a collaboration between the University of California, Berkeley and the Shell Center team at the University of Nottingham, with support from the Bill and Melinda Gates Foundation. The team works with the Silicon Valley Mathematics Initiative and school systems across the US and UK to develop improved assessment. They use formative assessment tasks to help teachers develop instructional units.

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[The link to MAP is http://map.mathshell.org/materials/background.php]

Stanford University, Graduate School of Education, Teaching Resources
http://ell.stanford.edu/teaching_resources
From the website: Our team is currently developing sets of teaching resources that exemplify high-quality instruction for ELLs across three content areas. The resources will correspond to the widely adopted Common Core State Standards in English Language Arts and Mathematics and to the Next Generation Science Standards.

Teaching Channel
https://www.teachingchannel.org/videos?categories=topics_common-core
REL West summary: The videos on the Teaching Channel website cover a variety of subjects and classroom topics for teachers at all grade levels (K-12). The topics of the videos include: planning, class culture, behavior, engagement, differentiation, assessment, collaboration, common core, new teachers, and celebrating teachers. Teaching Channel has teamed up with Common Sense Media to develop a series of 9 videos covering digital literacy and the ELA Common Core Standards.

3. Additional Resources

Achieve the Core/Student Achievement Partner (SAP)
http://www.achievethecore.org/
From the website: Founded by three of the contributing authors (i.e., David Coleman, Jason Zimba, and Susan Pimentel) of the Common Core State Standards, SAP played a leading role in development of the Common Core State Standards, a process that drew on the input of thousands of teachers, business leaders, researchers, and policymakers. As contributing authors of the Common Core State Standards, Student Achievement Partners helped ensure that the Standards were based on the best available evidence of what students need to know and be able to do in order to be ready for the demands of college and career.

Center on Instruction
http://www.centeroninstruction.org
From the website: From October 2005 to September 2012, the Center on Instruction (COI) was one of five national content centers funded by the U.S. Department of Education to support the 16 Regional Comprehensive Centers as they helped state education leaders raise student achievement, close achievement gaps, and improve teaching and learning for all students in their state. ... We encourage educators working to turn around the lowest performing schools such as School Improvement Grant (SIG) grantees and/or those implementing College and Career Ready Standards, including the Common Core State Standards, to explore our collection of resources; effective instruction is one of the key elements of school improvement strategies.

Common Core State Standards: Implementation Tools and Resources
http://www.ccsso.org/Resources/Publications/Common_Core_State_Standards_Implementation_Tools_and_Resources.html
From the website: CCSSO (Council of Chief State School Officers) developed this list of tools and resources to point states to promising practices and tools to support Common Core State Standards implementation. This document primarily lists resources developed by CCSSO and the lead writers of the standards and is not intended to be a comprehensive list of all resources available.

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Common Core State Standards Initiative
http://www.corestandards.org/the-standards
From the website: The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.

Edutopia
http://www.edutopia.org/common-core-state-standards-resources
REL West summary: This website provides a clearinghouse of resources for teachers to better understand the Common Core and to use as they plan curriculum. Resources include videos on lesson ideas for specific standards, lesson vignettes, and a platform where teachers can exchange lesson plans and ideas.

Methods

Some of the resources summarized here were borrowed from a Reference Desk memo developed for the California Department of Education (CDE), in which REL West, working with the California Comprehensive Center, provided information about open/free sources on how to adopt curriculum to align it to the Common Core. We have revisited these resources to ensure the information we provide here is up-to-date.

The rest of the resources were located by searching for recent government publications and peer-reviewed journal articles in the following databases: ERIC, ProQuest, PsycINFO, PsycArticles, and Google Scholar. The search terms included "Common Core" AND ("textbook" OR "instructional materials") AND (English OR Mathematics). In addition, we also consulted other RELs, and searched using Google for appropriate organizations that may act as resources on this issue. Reviews of the resulting websites, abstracts, and articles with description that appeared relevant to the search yielded new sources for this memo.

This memorandum is one in a series of quick-turnaround responses to specific questions posed by educators and policymakers in the Western region (Arizona, California, Nevada, Utah), which is served by the Regional Educational Laboratory West (REL West) at WestEd. This memorandum was prepared by REL West under a contract with the U.S. Department of Education's Institute of Education Sciences (IES), Contract ED-IES-12-C-0002, administered by WestEd. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

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