Secondary Two Mathematics:  
An Integrated Approach

**Developer/Publisher:** Mathematics Vision Project in partnership with USOE

**View Resource**

**Review Year:** 2014

*Note that this resource may have been updated since the review. Check the developer website to see if there is a more recent version available.*

**Format:**
- ☒ online
- ☒ PDF
- ☒ editable document

**Professional Development:**
Professional development options, meant to meet the needs of the teachers, is available. Visit the Mathematics Vision Project website to learn more.

**Standards Correlation:**
View CCSS correlations.

**Reviewer Usability Feedback on Current and Adapted Use**

<table>
<thead>
<tr>
<th>Would Not Use</th>
<th>Current Use</th>
<th>Adapted Use</th>
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<td>Supplemental Material</td>
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<tr>
<td>Portion of a Unit</td>
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<tr>
<td>Unit Replacement</td>
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<tr>
<td>Textbook Replacement</td>
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**Number of reviewers**

**Amount of work required to bring into CCSS alignment:**
Minor

**2014 OER Review Full Report**

*This resource was reviewed by Washington educators with subject matter expertise and deep familiarity with the state learning standards. Learn more about the review instruments and process by reading the full report*
Instructional Materials Evaluation Tool (IMET):

Educators Evaluating Quality Instructional Products (EQuIP) Overall Rating:
Exemplar if Improved (8.3)

Background from OER Project Team
The Mathematics Vision Project has partnered with Utah State Office of Education on this open textbook focused on an integrated model of the Common Core State Standards. The book is designed around the Comprehensive Mathematics Instruction (CMI) model. *The CMI framework is an integral part of the materials. Knowing and understanding the framework is essential to facilitation of a successful implementation and professional development with this resource is highly suggested. Both teacher and student versions are available. Additional support materials (answer keys and sample assessments) are available to teachers for a small fee. This should factor into the viewer’s analysis of the review results.*
Reviewer Comments

Review 1

Ideal Use/Comments
This curriculum is very good in my eyes. I like the launch/explore/discuss protocol. These are clearly outlined in the lesson plans for the instructor. They are thorough and well planned. This protocol meets the "Practice-Content Connections" with in the HSPC document section 5. The amount of practice is nicely suited for the majority of students. The CCSS instructor document is great.

Very strong in "Interpreting Functions" F-IF #1-#9. I like the linear flow and layout, very few "horizontal" dives where a student with a device could get lost. No distractions and useless added material. In unit 6.8, I like the simple connection between the factored form, x-intercepts, y-intercepts. Students have difficulty with this topic making the connections between factoring and the "information" it lends about the graph of a parabola. Well done here.

Overall, this review was very intriguing for me. I liked the curriculum and will be using some of these units in my personal class. I see a novice teacher up to a veteran teacher being comfortable in teaching this curriculum. It is very close to being textbook adoptable in my eyes. This curriculum could be used in a one to one device audience or printed and bound as a textbook. I like that it is available in "ibooks", very nice for students and teacher navigation who use iPad devices.

Challenges:
- The main weakness is the lack of embedded technology and manipulatives with in the curriculum.
- I am very concerned with the lack of example exercises for students. Research has demonstrated that the visual process of students "seeing" a worked exercise is critical to learning content.
- Need for continued scrolling through past lessons if a student is using a device
- The lack of assessments and embedded mini-quizzes with in the curriculum

Suggestions:
- I would recommend spending the time adding hyper-links from the CCSS standards to the unit level of the modules. Teachers would use this feature when planning.
- I firmly believe sine and cosine MUST be connected to the coordinate plane when introducing the subject; this makes a very simple connection for the student to x and y graphing on a Cartesian Plane. In the developers presentation of sine and cosine (for the first time for the algebra student) the student only observes side ratios of on a right triangle. Which is ok but a possible overlay of these triangles onto a coordinate axis would be superb.

Review 2

Comments/Ideal Use:
I was impressed with this curriculum; however, the lack of answer keys and rubrics for student performance is a glaring deficiency. Practice standards need to be specifically addressed as well. The ideal use for this resource is for a classroom in which the teacher has a deep understanding of the CCSS content standards, shifts, and practice standards. The students should all show mastery of learning from previous grades (6-8). This is NOT suited for ELL students. Although this material could be handled by a newer teacher, a veteran would be more successful.

Challenges:
- Lack of answer keys/rubrics for student performance
- Limited support for struggling/ELL students
- No technology/media
- No specific reference to the math practices in the lessons (or the correlation documents)
Suggestions:
• Provide a supplemental document with such answer keys/rubrics.
• Provide a supplemental document with "Skill Builder"/Review lessons and answers.
• Embed YouTube/Kahn Academy type talks or real-life situations via media.
• Specifically identify these practice standards in a line or two after the content standards in the teaching hints for each lesson.

Concerns:
• Assessment needs work - missing rubrics, answer keys, and ability for students to check their own work
• Missing technology

Suggestions:
• Complete an answer guide with scoring rubrics
• Include a student driven/initiated learning experience away from the necessary directions listed in the teacher notes. More individual learning opportunities

Comments/Ideal Use:
This could be used as a classroom text for an Integrated Math 2 course. Experienced teachers would find this user-friendly. A beginning teacher would find the lesson notes quite helpful, but would need to have answer keys for all the in-class activities as well as the Ready-Set-Go assignments. Also, modules could be used to replace units in a teacher's current textbook.

Concerns:
• No clear identification of the Standards for Mathematical Practice. The only mention of the Standards for Mathematical Practice is in the overview of the materials.
• No Answer Keys provided for student work. No assessment materials or suggestions included
• Addresses standards not in the PARCC Model Content Framework and leaves out some the standards included in the framework

Suggestions:
• Provide guidance in the lesson notes to teachers regarding which practices to focus on and how to engage students in those practices
• Include answer keys for student work. Include sample student answers showing expected depth/detail of work. Include rubrics to help teachers evaluate student work.
• Provide suggestions to teachers about what to assess and how. Better yet, provide assessments that teachers can use - both formative and summative. Ensure there is a variety of assessment methods included.
• Consider providing a modified version that doesn't include standards not in Math 2, and that does include ALL standards in Math 2.