

Math Curriculum Review

Investigations 3

While determining the alignment of the instructional materials, Investigations 3 scored high in the focus, coherence, and rigor. Standards for Mathematical Practices were handled in a grade appropriate way, and well connected to the content being addressed. The curriculum presented a balance of mathematical procedures and deeper conceptual understanding. The curriculum consistently provided open ended tasks and opportunities for students to independently apply mathematical concepts and solve challenging problems with persistence. Investigations 3 provided various modes of assessment including performance tasks and student self assessment measures. The curriculum supported diverse linguistic backgrounds through an online Spanish translation. The scope and sequence of the program attends to the shifts of focus, coherence, and rigor appropriate to the grade level connecting supporting standards to major standards. Investigations 3 provides opportunities for students to independently apply mathematical concepts in real-world situations. Lesson's develop student's conceptual understanding through multiple representations and opportunities for students to write and speak about their understanding. Investigations 3 supports fluency and efficiency with core calculations and mathematical procedures. The program provides the appropriate level and type of scaffolding, differentiation, and support for all learners. Materials provide extensions for students who are exceeding the grade level standards without teaching outside of the grade level. The committee decided to further review Investigations with a representative from the publisher on February 13, 2017. The committee decided to recommend Investigations 3 for adoption.

My Math

While determining the alignment of the instructional materials, MyMath scored low in presenting a balance of mathematical procedures and deeper conceptual understanding. The curriculum was found to be overwhelmingly procedural. In the major work of the grade, each standard was presented separately, not connected. Students are not truly given opportunities to independently apply mathematical concepts because the curriculum dictated the required strategy for students. This greatly impacted the rigor of the curriculum by failing to engage students in productive struggle, and created concerns for adequately preparing students for SBAC. Additionally, the material content did not align with Nevada Academic Content Standards in that the opportunity for student discourse and collaboration was limited. The material was not found to demonstrate the coherence of the knowledge, skills, and abilities appropriate to the grade level. The committee decided to further review My Math with a representative from the publisher on February 13, 2017. Based on that review, the committee decided not to recommend My Math for adoption.

Bridges

While determining the alignment of the instructional materials, Bridges did not adequately target the major work of grade levels. Lessons and units targeting supporting work of the grade did not have a visible connection to the major work of the grade. Bridges showed a lack of student self assessment opportunities and performance tasks were few. This lack of performance tasks created concerns for adequately preparing students to meet the requirements of the Nevada Academic Content Standards and statewide assessments such as SBAC. Bridges only provided a surface level of support for students working below grade level or extensions for students with high interest or working above grade level. The teacher editions did not label questioning strategies making it difficult for teachers to include questions to check for understanding at all Depth of Knowledge levels.

Bridges curriculum was not found to be accurate and current as the materials have not been updated since 2012. The committee decided to further review Bridges via phone conference with a company representative on February 13, 2017. Based on that review, the committee decided not to recommend Bridges for adoption.

Envision 2.0

While determining the alignment of the instructional materials, Envision 2.0 materials did not focus on the knowledge, skills, and abilities appropriate to the grade levels consistently. Specifically in grades K, 1,2 in regards to coherence, the instructional materials did not have enough materials to be viable for a school year and did not always meet the depth of the standards. Additionally, Envisions 2.0 did not meet the rigor needed to prepare students for SBAC. While most tasks were aligned to the grade level standards, the material and tasks did not allow students multiple ways to for students to respond. Assessments in grades 3rd, 4th, and 5th had items outside of the grade level thus creating a lack of coherence.

The committee decided Envision 2.0 needed no further review.

Everyday Math

While determining the alignment of the instructional materials, Everyday Math did not demonstrate coherence of the knowledge, abilities, and skills appropriate to the grade level. The materials did not demonstrate the complexity and rigor of the grade level. Tasks were found to be procedural and did not include higher levels of DOK questions, real world applications, or reflect the mathematical practices. Lessons in kindergarten and 2nd grade did not develop the conceptual understanding that the standards called for specifically in NBT. Additionally the materials did not provide Smarter Balanced assessment type questions or performance-based tasks. The materials did not align to the Nevada Academic Content Standards.

The committee decided Everyday Math needed no further review.

Eureka Math

While determining the alignment of the instructional materials, Eureka Math did not demonstrate the rigor of some standards due to the low level of conceptual activities. The materials did not provide a table of contents, glossary, supplemental pages, and index. The materials did not have an electronic or interactive format available. Hands on activities are not included in all lessons to build conceptual understanding. Eureka Math assessments ask students to respond in scripted or in only one way not allowing students multiple ways to respond. Tasks did not appear to apply to the diversity of students and their abilities, interests, and learning styles. Lesson format does not include differentiation or ELL resources. In grades, 1,2,3,4, and 5, content outside of the grade level is presented and assessed thus resulting in the materials not being aligned to the Nevada Academic Content Standards and statewide assessments. The committee decided Eureka needed no further review.

I-Ready

While determining the alignment of the instructional materials, I-Ready was not consistent with the progression of the knowledge, skills, and abilities at each grade level. Lessons and tasks were not interdisciplinary when appropriate. Questioning strategies and/or checks for understanding at all Depths of Knowledge was inconsistent in the Teacher's Edition. Additionally, the eight Mathematical Practices were not addressed for students. Materials did not provide multiple ways for students to respond and included very little hands on materials. This material did not have a technology component. I-Ready did not align to the Nevada Academic Content Standards. The committee decided I-Ready needed no further review.

GoMath

While determining the alignment of the instructional materials, GoMath had a cumbersome format that did not provide a consistent, logical layout with identified standards. Throughout the curriculum, the content was missing access through multiple modalities and instead provided tasks that were not to the depth and breadth of the domains of the Nevada Academic Content Standards. The materials did not focus on the knowledge, skills, and abilities appropriate to grade levels. The material contained content outside of the major work of a grade level. Questions and tasks did not encourage the development and application of higher level thinking skills. Discourse opportunities were lacking in GoMath which does not support 21st Century skill development of collaboration, creative thinking, and problem solving. The material did not provide a strategic use of mathematical tools, including technology. The committee decided Go Math needed no further review.