At ORIGO Education, our mission is to make learning mathematics meaningful, enjoyable, and accessible for all. We achieve this by providing curriculum resources for teachers and students that not only improve student learning but, importantly, create an enjoyment of mathematics and build and confidence in mathematics, for both teachers and students. When districts or schools are searching for a new mathematics program, an adoption committee works to match the needs of the school or district, the requirements of a new program, and the resources of the community. The data-gathering and decision-making at this exploration stage are critical to the long-term success of a major investment in a new mathematics program.

The EdReports rubric and associated reviews are a logical starting place for this exploration as they provide baseline information about standards coverage, the balance of rigor, and the integration of the Standards for Mathematical Practice. In order to achieve long-term success, *ORIGO* believes that adoption committees should also consider the shared vision between the program and the district, the fit of the program with current needs and initiatives, and the capacity of the building or district to implement the program with fidelity.

As we reflect on the review process and the resulting assessment of *Stepping Stones 2.0*, the consistent scoring on any given indicator (i.e. all grade levels often receive the same score for a given indicator) on the rubric confirms that *Stepping Stones* is a coherent and consistent program. We encourage committees to use the results of this review as one element of a broader exploration and adoption process.

Why do schools and districts choose Stepping Stones?

Stepping Stones is typically adopted by schools or districts that share *ORIGO's* beliefs:

- Learning is a social process that requires language and discourse;
- Students who develop strong thinking, problem-solving, and communication skills grow into productive, innovative members of society;
- Content taught conceptually, and in a logical, learner-friendly sequence develops deep understanding and success; and
- Technology empowers rather than replaces educators.

These beliefs are embedded in *Stepping Stones*, a program designed around spaced teaching and practice, and building strong procedural fluency from a conceptual foundation. Some of these beliefs and design features are reflected in the EdReports' review process, while others are not. Schools and districts that implement *Stepping Stones* with fidelity find positive changes among teachers and successful mathematics learning for students. <u>Visit our web site to read about these schools and districts</u>.

Responses to the EdReports' reviews

To help schools use the EdReports' reviews most effectively, we are providing responses to some key findings raised in the reviews.

Indicator 1d:

The amount of content designated for one grade level is viable for one school year to foster coherence between grades.

EdReports' Evaluation, Grade K: The instructional materials [for Kindergarten] include a total of 132 days of instruction when all lesson activities, including differentiation, games, and other digital resources, are included for each lesson. Teachers would need to modify materials to meet the minimum viable curriculum of 140 days.

ORIGO's response to the evaluation: The Kindergarten program is designed with 72 two-day lessons (144 days of instruction). The differentiation, games, assessments, and other resources included in the program are added to this and provide resources well in excess of the 140-day standard. From the Program Overview:

slate	channels	Stepping Stones					favorites	history	playlists	glossary	support	account	logout
start	Stepping Stor	pping Stones 2.0 overview general topics 🗸											
		Kindergarte recomment with the tw recomment	e of the <i>C</i> ten, each nded that wo accom ndation w , providin	RIGO Step module ha Kindergar panying si ill provide g a total o	oping Stones as six whole- ten teachers mall-group a 144 days of i f 144 lessons	class less teach a activities instructio	ons and 12 s whole-class l on the next o on. For Grade	mall-gro esson on lay. Follo es 1 to 6, e	up activitie one day ai wing this each modu	s. It is nd follow u le consists	of		

Indicator 1e: Materials are consistent with the progressions in the Standards.

EdReports' evaluation, Grades 3, 5, and 6:

Grade 3: The instructional materials provide students with extensive grade level work. However, there is no evidence of Standards 3.NF.3a, 3.NF.3b, 3.NF.3c, 3.MD.2, and 3.MD.3 being addressed in the materials.

Grade 5: The instructional materials provide students with extensive grade-level work, although there is no evidence of Standards 5.G.3 and 5.G.4 being addressed in the materials.

Grade 6: The instructional materials provide students with extensive grade level work, although there is no evidence of Standards 6.NS.7 and 6.NS.8 in the materials.

ORIGO's response to the evaluation: The Resources Tab on the *Stepping Stones* Overview Page includes correlations by lesson and by standard for each grade level in the program. The correlations by standard clearly identify the lessons that support each of the standards named above.

Grade Level	Standard	Stepping Stones Lessons		
3	3.NF.3a	Grade 3, Module 8, Lessons 8 and 9		
3	3.NF.3b	Grade 3, Module 8, Lessons 8 and 9		
3	3.NF.3c	Grade 3, Module 8, Lessons 5 and 9		
3	3.MD.2	Grade 3, Module 8, Lessons 10, 11, and 12		
3	3.MD.3	Grade 3, Module 6, Lessons 9 and 10		
5	5.G.3	Grade 5, Module 5, Lessons 10, 11, and 12		
5	5.G.4	Grade 5, Module 5, Lessons 10 and 11		
6	6.NS.7	Grade 6, Module 1, Lessons 7 and 8		
6	6.NS.8	Grade 6, Module 1, Lessons 9, 10, 11, and 12		

Indicators:

Indicator 2g.i: Materials prompt students to construct viable arguments and analyze the arguments of others concerning key grade-level mathematics detailed in the content standards.

Indicator 2g.ii: Materials assist teachers in engaging students in constructing viable arguments and analyzing the arguments of others concerning key grade-level mathematics detailed in the content standards.

EdReports' evaluation: (examples here from Grade 3; consistent comments and scores across all grade levels K–6)

Indicator 2g.i: The instructional materials reviewed for *ORIGO Stepping Stones* 2.0 Grade 3 do not meet the expectations for prompting students to construct viable arguments and analyze the arguments of others concerning key grade-level mathematics detailed in the content standards.

There are no opportunities in the Student Journal or assessments for students to construct viable arguments or analyze the arguments or the work of others. MP3 is identified in the Steps portion of the lesson. Teachers are given sentence stems to provide students to promote construction of arguments and justification of student thinking.

Indicator 2g.ii: The instructional materials reviewed for *ORIGO Stepping Stones 2.0* Grade 3 meet expectations for assisting teachers in engaging students to construct viable arguments and analyze the arguments of others concerning key grade-level mathematics.

Teacher guidance, questions, and sentence stems for MP3 are found in the Steps portion of the lessons. In some lessons, teachers are given questions that prompt mathematical discussions and engage students to construct viable arguments, and in other lessons, teachers are provided questions and sentence stems to facilitate students in analyzing the arguments of others, and to justify their answers.

ORIGO's response to the evaluation: These two indicators both relate to Standard for Mathematical Practice 3: Construct viable arguments and critique the reasoning of others. *Stepping Stones* consistently scored 2/2 on Indicator 2g.ii, teacher support for engaging students in this work and consistently scored 0/2 on Indicator 2g.i, prompting students to engage in this work. The latter is apparently the result of not including sufficient written prompts in the Student Journals and assessment items. Here is one written example, from Grade 3, Module 6, Lesson 1.



Given our belief in learning as a social experience, we appreciate the recognition of the consistent teacher support for this difficult practice, and believe that students will in fact be prompted to construct and critique arguments as teachers implement the program with fidelity.

Indicator 2g.iii:

Materials explicitly attend to the specialized language of mathematics.

EdReports' evaluation: (example here from Grade 3; consistent comments and scores across all grade levels K–6)

Accurate mathematics vocabulary is present in the materials, but ... [w]hile vocabulary is identified throughout the materials, there [are] no explicit directions for instruction of the vocabulary for the teacher in the Steps portion of the lesson.

ORIGO's response to the evaluation: Effective vocabulary development comes from the use of language in context and the progression from student-friendly language to more formal language. This develops true understanding of the vocabulary and the associated mathematical idea(s). While we may consider adding some direct vocabulary instruction in the next edition of *Stepping Stones*, we will continue to build vocabulary through understanding in context, rather than memorization.

<u>ORIGO team members are happy to talk with schools and districts about Stepping Stones</u> and about this review. We welcome the opportunity to provide additional information about how Stepping Stones addresses important aspects of elementary mathematics teaching and learning, both those addressed by the EdReports' rubric and those not addressed by this rubric. We look forward to working with schools and districts to determine if Stepping Stones is the elementary mathematics program that most effectively meets their needs.