

VISION

It has always been the vision of the author team to make enVisionMATH unlike any previous elementary grades mathematics curriculum. The authors knew that enVisionMATH had to be different if it honestly embraced the research- and classroom-proven curriculum and instruction principles shown to promote the depth of mathematical understanding needed for student success and higher achievement. Welcome to **enVisionmath2.0** (Figure 1). This introduction to the program from the authors shares our major goal for **enVisionmath2.0** and how that goal was translated to the organization of the program and the instructional model used on a daily basis.

PROGRAM GOAL

What was the major goal in developing enVisionmath2.0?

The major goal in developing **enVisionmath2.0** was to create a program for which we can promise student success and higher achievement. We have achieved this goal. We know this for two reasons.

1 EFFICACY RESEARCH

First, the development of **enVisionmath2.0** started with a curriculum that research has shown to be highly effective: the original enVisionMATH program (PRES Associates, 2009; What Works Clearinghouse, 2013).

2 RESEARCH PRINCIPLES FOR TEACHING WITH UNDERSTANDING

The second reason we can promise success is that **enVisionmath2.0** fully embraces time-proven research principles for teaching mathematics with understanding. One understands an idea in mathematics when one can connect that idea to previously learned ideas (Hiebert et al., 1997). So, understanding is based on making connections, and **enVisionmath2.0** was developed on this principle.

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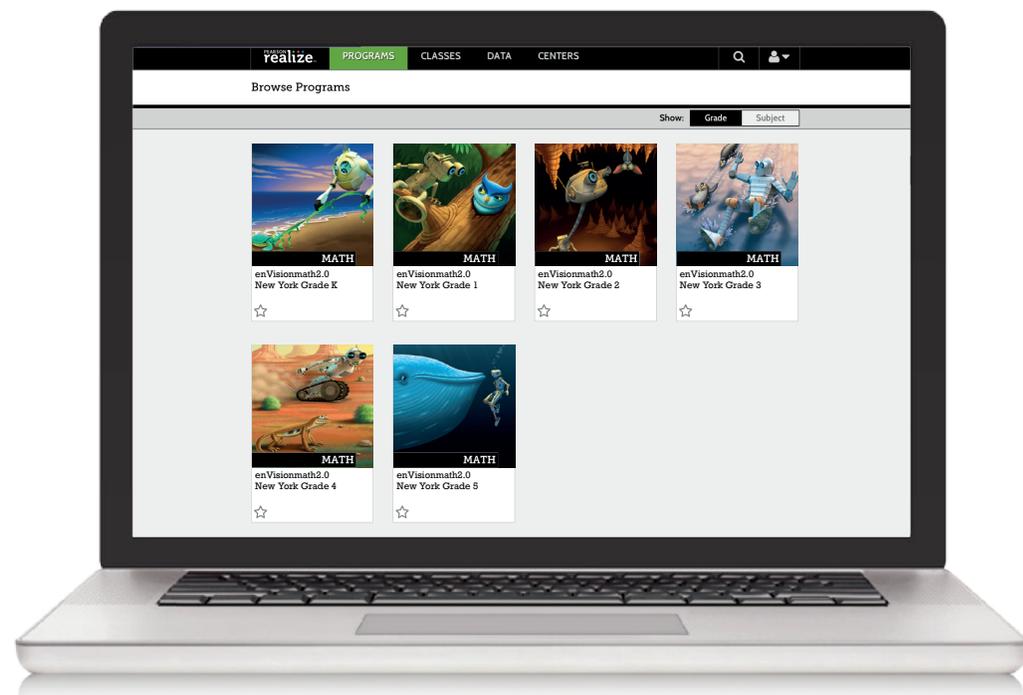


Figure 1: Grades K–5 in **enVisionmath2.0** available at PearsonRealize.com

PROGRAM ORGANIZATION

How is enVisionmath2.0 organized, and why was this structure chosen?

There are many ways to organize a curriculum. However, when the goal is to develop understanding, the challenge is to organize the curriculum in a way that best promotes mathematical content connections. We don't want students to view mathematics as small, disconnected pieces of content.

The New York State Next Generation Mathematics Learning Standards are grouped into clusters to emphasize content connections between standards in a cluster. Clusters are then grouped into domains. We organized **enVisionmath2.0** to focus on clusters. We made each cluster the focus of one or more topics as illustrated in Figure 2 below and in Figure 3 at the right.

There are two important advantages of using clusters as the primary organizer for content.

1. The important work for a grade can be a priority for earlier in the year, enabling extensive exposure to this content prior to external assessments.
2. There are other opportunities to make a stronger course sequence when clusters from the same domain don't have to be together. These include opportunities at some grades to place supporting content near important content it supports.

Note that cross-cluster and cross-domain connections are highlighted when natural content connections exist.

Another layer in organizing **enVisionmath2.0** relates to the eight Standards for Mathematical Practice as described in the New York Standards. Mathematical practices are the habits of mind, processes, and dispositions that enable a learner to understand mathematics and to use or do mathematics with understanding. Mathematical practices translate to observable verbal and written behaviors by students as they do mathematics. Since the goal and promise of **enVisionmath2.0** is to develop understanding, the mathematical practices are infused in all aspects of the program.

CLUSTER	TOPICS	LESSONS
Develop understanding of fractions as numbers.	Topic 12 Understand Fractions as Numbers	<p>Lesson 12-1 Divide Regions into Equal Parts (NY-3.NF.1, NY-3.G.2)</p> <p>Lesson 12-2 Fractions and Regions (NY-3.NF.1, NY-3.G.2)</p> <p>Lesson 12-3 Understand the Whole (NY-3.NF.3c, NY-3.NF.1)</p> <p>⋮</p>
	Topic 13 Fraction Equivalence and Comparison	<p>Lesson 13-1 Equivalent Fractions: Use Models (NY-3.NF.3a, NY-3.NF.3b)</p> <p>Lesson 13-2 Equivalent Fractions: Use the Number Line (NY-3.NF.3a, NY-3.NF.3b)</p> <p>Lesson 13-3 Use Models to Compare Fractions: Same Denominator (NY-3.NF.3d)</p> <p>⋮</p>

Figure 2: An example of how content in **enVisionmath2.0** is organized to focus on clusters

“We organized **enVisionmath2.0** to focus on clusters.”

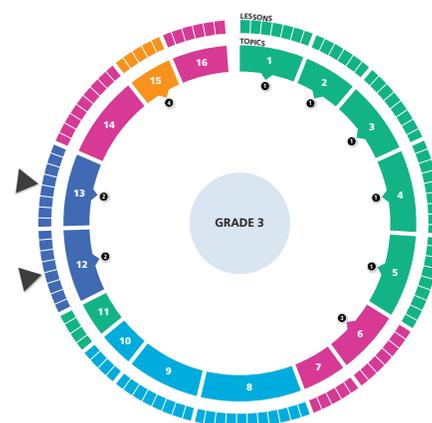


Figure 3: The 5 colors on the wheel show how topics focus on 5 content domains. Within those domains, the Grade 3 New York Standards group related standards into 11 clusters. Moving around the wheel, here is how each of those 11 clusters is the focus of 1 or more topics:

- Topics 1–2
- Topics 3–4
- Topic 5
- Topic 6
- Topic 7
- Topics 8–10
- Topic 11
- Topics 12–13
- Topic 14
- Topic 15
- Topic 16

For a list of the domains and clusters, see page 7.