Illustrative Mathematics + LearnZillion = Teacher-friendly
LZ Illustrative Mathematics Curriculum (Grades 6-8)

William McCallum
bill@illustrativemathematics.org
@wgmccallum

Colette Chambers
colettechambers@learnzillion.com
@cfchambers

Joseph DuLaney
josephdulaney@learnzillion.com
How many were at the IM session on Wednesday and Thursday?
What were the key take-aways?
LearnZillion takes the highest quality material and makes it classroom-ready and teacher-friendly.
Now 1 in 3 US teachers use our materials

- 1.5 million teachers have free accounts
- 84% of U.S. districts have teachers using LearnZillion
- 1+ million monthly unique visitors
We take the highest quality curriculum and make it teacher friendly and classroom ready.

Illustrative Mathematics

Authored by Bill McCallum.

Rated the highest quality math curriculum on Edreports.
Illustrative Mathematics’ Vision

A world where learners know, use, and enjoy mathematics.
Purposeful Design Features

• Problem-based
• 5 practices framework
• Universal design for learning
• Embedded supports:
  • Students with disabilities
  • English learners
• Extensions for students who are ready for more
Overarching Design Structure

Invitation to the mathematics  →  Deep study of concepts and procedures  →  Consolidating and applying
The Structure of a Lesson

- Warm-up
- Activity
- Activity Synthesis
- Lesson Synthesis
- Cool-down
Here is a portrait of a student.

Look at Portraits A–E.

1. How is each one the same as or different from the original portrait of the student?
2. Some of the images are **scaled copies** of the original portrait. Which of the Portraits A–E do you think are scaled copies? Explain your reasoning.

3. What do you think **scaled copy** means?
1.1 Warm-up Synthesis

Let's invite a few classmates to share their observations.

We'll organize our observations by features of scaled copies and features of those that are not scaled copies.
Can anyone share their definition of a scaled copy?
1.1 Warm-Up

A. Original Portrait
B. Portrait
C. Original Portrait
D. Portrait
E. Portrait
Let's explore scaled copies.

- You'll have 3 minutes of quiet work time.
- Then you'll have 2 minutes to share your responses with your partner.
- You and your partner may have very different answers. Listen carefully to each other's approach and be prepared to share your partners' strategy with the group.
- Finally, we'll have a whole class discussion to share the various strategies used.
On the top left is the original drawing of the letter F. There are also several other drawings.

1. Identify all the drawings that are scaled copies of the original letter F drawing. Explain how you know.
2. Examine all the scaled copies more closely, specifically, the lengths of each part of the letter F.

How do they compare to the original?

What do you notice?
3. On the grid, draw a different scaled copy of the original letter F.
1.2 Activity

[Grid with a letter F drawn on it]
For each drawing, indicate whether you think it's a scaled copy or not.

- What features do the scaled copies have in common?
- How do the other copies fail to show these features?
1.2 Activity Synthesis

Original

Drawing 1  Drawing 2  Drawing 3

Drawing 4  Drawing 5  Drawing 6

Drawing 7
Think about the strategies we saw used in this activity.

What similarities do you notice?

What differences do you notice?
The Structure of a Lesson

Introduction to the Mathematics

Deep Concepts
Make Connections
Work Toward Mastery

Consolidating Ideas
and Application (MP4)

Ongoing Practice With Procedures

Card 3 of 20
1.4 Cool-Down

Are any of the figures B, C, or D scaled copies of figure A?
Explain how you know.
Design Structure at Different Levels

OVERARCHING DESIGN

Unit Level
- Invitation to the mathematics
- Introductory lesson
- Instructional lessons
- Culminating lesson

Lesson Level
- Warm-up
- Classroom Activities
- Synthesis and cool-down

Activity Level
- Launch
- Work time
- Synthesis
Balance

- Conceptual Understanding
- Procedural Fluency
- Mathematical Proficiency
- Applications of Mathematics
Conceptual Understanding

- Problem solving -> conceptual understanding
- Conceptual understanding -> procedural fluency
- Procedural fluency -> problem solving
Let’s check it out!
Scavenger Hunt
“We adopted the Illustrative Mathematics curriculum district-wide because we saw huge increases in student engagement with the materials. Students were constantly talking about math, using precise language, and constructing mathematically sound arguments. The curriculum facilitates productive struggle for our learners, and teachers have been excited to shift their instruction from being the ‘sage on the stage’ to the ‘guide on the side.’”

-Corrine Williams, Evergreen Public Schools

“The lessons on LearnZillion Illustrative Mathematics are ready to go. All of the teacher information is there, and it reduces my planning time, I'd normally spend all day preparing my lessons for the week, and it'd be my Sunday. But with these, I can just focus on figuring out what I'll need to do for my individual students.”

- Tarnashia Russell, eighth-grade math teacher, Port Allen Middle School, West Baton Rouge Parish
Maslow’s Hierarchy of Needs: Planning

1. Prep whole class student material
2. Prep whole class teaching notes
3. Prep small group student material
4. Prep small group teaching notes
The price is right

- $/student for textbooks
- $/student to print OER curriculum
- $/student to get print from OER publisher
- $/student for LZ print and digital
- $/student for LZ digital
Schedule a District Demo

William McCallum
bill@illustrativemathematics.org
@wgmccallum

Colette Chambers
colettechambers@learnzillion.com
@cfchambers

Joseph DuLaney
josephdulaney@learnzillion.com