# **POWER IN NUMBERS** ADVANCING MATH FOR ADULT LEARNERS

Power in Numbers is managed by Luminary Labs under contract with the U.S. Department of Education (Contract Number: ED-VAE-14-D-0006/0004). The opinions expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education and no official endorsement by the U.S. Department of Education should be inferred.

## Video Guide for Classroom Use

#### Summary

This video series is part of an initiative by the Office of Career, Technical, and Adult Education (OCTAE) which aims to curate high-quality open educational resources (OER) to empower adult learners through applied math skills.

The series comprises of three 2 - 3 minute videos in English and Spanish and serves to promote the importance and relevance of advanced math skills.

#### **Learning Goals**

- To motivate adult learners through stories of how other learners have overcome common obstacles
- To ground advanced math in real-life applications
- To promote discussion of challenges and motivations for pursuing advanced math

#### **Additional Resources**

Visit the LINCS Learner Center math page to access additional math resources for adult learners:

English: https://learner.lincs.ed.gov/resources/math

Spanish: https://learner.lincs.ed.gov/resources/math?language=es

Math open educational resources may also be found on <u>www.oercommons.org</u>, including:

- https://www.oercommons.org/authoring/29001-curriculum-guide-for-finding-math-in-the-real-worl
- https://www.oercommons.org/authoring/29013-math-routines
- https://www.oercommons.org/browse?f.general\_subject=mathematics&f.sublevel=adult-education

### **Best Practices**

Determine a viewing schedule for the videos that syncs with the needs of your learners and the time you are able to work with them. Do not feel that these videos must be viewed in one sitting. They may be viewed all together or over the duration of your course. Some examples of how they may be used are:

- At the beginning of a semester or term
- At the end of a semester or term
- Throughout the duration of the course, when you feel learners will need a boost in motivation

Power in Numbers is managed by Luminary Labs under contract with the U.S. Department of Education (Contract Number: ED-VAE-14-D-0006/0004). The opinions expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education and no official endorsement by the U.S. Department of Education should be inferred.

## **POWER IN NUMBERS** Advancing math for adult learners

## Video Guide for Classroom Use (continued)

#### **Discussion List**

1. Introduce the series: "Today we will discuss our motivations and concerns about math."

Key concepts: persistence, overcoming doubt, momentum

2. Encourage group discussion on the themes expressed in the video(s). Whenever possible, show all three videos prior to the discussion. However, if time is limited, the prompts below can also be used for a single video.

Key concepts: past struggles with math, shared experiences, growth and career pathways possible through advanced math

#### **Discussion Prompts:**

- What similarities do you see between the stories in the video(s) and your own life?
- Where do you see math coming in handy in your own life?
- Have you ever said, "I hate math", or "I'm just not a math person?"
- What have been your proudest moments in your life? What about in your academic studies?
- Why are you taking this course? What will passing this class allow you to do next?
- What motivates you to attend class?
- Who in your life supports you? Who do you support?
- What would you say to support adult learners of math like yourself?

3. After learners have had a chance to discuss, follow up by extending the lesson in the appropriate direction for the class.

To give an extension assignment for outside of class, consider asking learners to write a few sentences or bullet points in response to the following question. Encourage learners to share their responses during the next class or in the course's online discussion board.

 In your math studies, what approaches or activities help you learn the material best? Consider what helps you the most during class, as well as outside of class.

For a longer extension assignment, consider implementing one of the following math journaling units:

- Journal exercise: https://www.oercommons.org/authoring/29013-math-routines
- Journal resource:
  <a href="https://thecornerstoneforteachers.com/math-journals/">https://thecornerstoneforteachers.com/math-journals/</a>

