

XQ Math is a new mathematics curriculum that:

- Centers on youth-tested project frames to truly capture students' interest, particularly those whom traditional mathematics instruction has failed to engage
- Puts students in a place where they are motivated to “activate” and “upgrade” their mathematical modeling skills in order to solve something they care about
- Introduces algorithms, formulas, and abbreviations only after a big idea has been discovered and grasped
- Ensures all students are engaged in specified course competencies
- Systematically builds students' confidence in their own mathematical agency, so that they begin to see themselves differently

Each XQ Math project module engages students in rigorous, creative, and meaningful work—work that prepares them for advanced mathematics—and flagrantly defies the idea that math is boring.

We are seeking a cadre of adventurous math educators to help us co-design this new curriculum, starting with Algebra 1 and Geometry.

We will support you as you launch project modules with your students by providing facilitation assistance, teacher guides, professional development and program content, all housed within an online app.

Interested in piloting XQ Math?
Contact aweltman@xqinstitute.org
to set up a conversation.



A Sampling of Available XQ Math Modules

On Brand: Will this advertising campaign succeed? Students create their own brand and evaluate a marketing plan using linear functions and regression.

Change the Story: Can you build a better future—using data? Students use linear functions and their graphs to model social change and write persuasive media pieces with the data displays they create.

Going Viral: How do we make something go viral—or stop it? Students use exponential functions and agent-based modeling to make recommendations for how to start—or stop—viral spread.

Mapping Your World: Can you navigate like ancient peoples did? Students create a mapped representation of their world using a home-made sextant, while enhancing their understanding of trigonometry and triangles.

80s Arcade: How do we design movement for characters in a fun arcade game? Students explore the nature of graphical transformations to create an 80s-style arcade game using computer simulation software.

Dream Building: What's a better design for this building? Drawing on their understanding of 2D and 3D shapes, students redesign a local space to better fit the needs of their community.

$$F_c = \frac{mv^2}{r}$$
$$F_g = \frac{GMm}{r^2}$$
$$\frac{F_c}{F_g} = \frac{GMm}{r^2}$$
$$= \frac{\sqrt{GM}}{r}$$

