

The primary motivation for changing the learning paradigm for Algebra 1 comes from an attempt to answer the question, “*What is the best use of our face-to-face time with students?*” As we researched the answer to this question, we came to believe that exchanging what usually happens at school with what usually happens at home (creating a “flipped” classroom), provides a number of advantages over a traditional learning environment:

- **More one-on-one time with students** – Since direct instruction of new material now takes place at home through video tutorials, a great deal more class time is available for me to help students. Class time can now be used for group discussions, asking questions and getting answers, providing support for struggling students, and extending the learning of advanced students. I will be able to assess their learning more often, provide guidance when needed, and encourage those who have lost confidence.
- **Differentiated Instruction / Learning** – Students who struggle can seek extra assistance with difficult skills and concepts, and focus on filling their learning gaps. Those who do not need assistance with a particular skill or concept can move forward without waiting through explanations and examples that they do not need. Each student can advance through the curriculum at their own pace, accelerating where they find the work easy, and taking more time where they find the work difficult.
- **Learning for Mastery** – Math skills and concepts build on each other. As a result, they must be learned sequentially. In this course, students will be required to demonstrate mastery of each new skill or concept before advancing to the next. The point of doing the work becomes to *understand*, not just to complete the assignments. This will help prevent learning gaps and significantly increase students’ opportunity for success. The challenge for students is to stay on pace so that they will finish ALL of the required work before the assessments are given.
- **Student-Centered Learning** – In a traditional lecture approach, the teacher is in control of the pace of a lesson. This leaves some students wanting to go slower, and others wanting to go faster. Now students are in control. As they watch a lesson and take notes they can pause, rewind, fast-forward, and replay lessons at their convenience. If a student is having difficulties with a concept or wants to polish up before a test, the videos will always be available.
- **Greater Accessibility to Support** – Direct instruction is now available when needed, not just on the day the lesson is “taught”. Students will have access to help from the teacher and their classmates as they work through practice and application problems, rather than having to complete these questions on their own. This should help decrease students’ anxiety and stress, and increase success.