Vision

To empower educators in transforming mathematics teaching and maximizing learning through the use of educational technology to ensure America's competitiveness in the 21st century.

Belief Statements

- Students should have a strong understanding of mathematical knowledge and skills, and the ability to apply these knowledge and skills, in relevant problem solving situations so they can thrive and become competitive leaders in the global economy.
- Educators should have a deep understanding of mathematical concepts and their applications to relevant problem solving situations, and should continue to gain insight and understanding of methods to encourage their students to learn, use and be intrigued by mathematics.
- The use of technology can support the teaching and learning of mathematics by bringing a multitude of learning experiences to captivate student interest and build mathematics understanding, proficiency, application and confidence.
    - Mathematics is most powerfully learned through discovery and exploration and technology provides these opportunities.
    - Mathematical understanding is increased when students and teachers use and apply technology to investigate mathematical concepts; including visualization, modeling, representation, simulation and communication. *
- All educators and students should have access to the resources and technology to support teaching and learning of mathematics at school and home.
- Students learn mathematics in different ways, and we need to provide technology, resources, varied instructional strategies and skills that allow them to excel, deepen their understanding and maximize their potential.
- Students build mathematical knowledge and understanding of mathematical concepts through problem solving. *
- Educational technology strengthens the connection of mathematical topics in different contexts.
- Technology proficiency will prepare our students and teachers for living, learning and meeting the complex challenges of the global economy in the 21st Century.

Technology is essential in teaching and learning mathematics; it influences the mathematics that is taught and enhances student's learning.
- National Council of Teachers of Mathematics

Essential Conditions

- Because technology is a catalyst in transforming mathematics teaching and learning when it is available to all teachers and students, adequate and sustained funding must be available specifically for educational technology and its support.

- Mathematical concepts, technology integration and pedagogical strategies are a part of teacher educator programs.
- Professional development to improve conceptual understanding of mathematics and supporting the infusion of technology in mathematics teaching and learning is a high priority.
- Follow-up opportunities and continued support is available to ensure success in transforming mathematics teaching using technology.
- High-quality, aligned, interactive, electronic mathematics content is available to all students and teachers.
- There is a strong on-going partnership between mathematics content and technology integration experts.

Guiding Questions

- What does research tell us about the ways technology can be utilized to enhance teaching and learning in mathematics?
    - What are the critical mathematics concepts that technology can help in deepening student understanding (i.e. visualization, modeling and simulation)?
    - How can technology in mathematics help educators differentiate instruction?
    - What real-world contexts will students encounter?
- How can technology be used in mathematics to provide students the opportunity to work and compete with 21st century tools in a 21st century context with 21st century content measured by 21st century assessments?
    - How can technology be utilized to encourage thoughtful, effective, global communication around mathematical concepts?
    - What mathematical real-world tools can assist students in producing relevant, high-quality products?
    - How can teachers make connections with community members to identify real mathematical problems?
- What successful practices and resources are available that provides a model for transforming mathematics instruction in the classroom?

*Adapted from the National Council of Teachers of Mathematics (NCTM) statements of belief.