

## Broadening the Purposes of Learning Mathematics

	Early Childhood and Elementary	Middle School	High School
<b>Broaden the Purposes of Learning Mathematics</b>	Each and every child should develop deep mathematical understanding as confident and capable learners; understand and critique the world through mathematics; and experience the wonder, joy, and beauty of mathematics.	Each and every student should develop deep mathematical understanding, understand and critique the world through mathematics, and experience the wonder, joy, and beauty of mathematics, which all contribute to a positive mathematical identity.	Each and every student should learn the Essential Concepts in order to expand professional opportunities, understand and critique the world, and experience the wonder, joy, and beauty of mathematics.
<p>In what ways can individuals in our school and district communicate with educators, families, and children about broadening the multiple purposes of school mathematics and related shifts in learning?</p>			

Please begin typing in your responses. Thank you!

Having monthly meetings to communicate their ideas.

Awareness of how to engage in Mathematics

Vertical alignment, appropriate vocabulary across grade levels, math fairs (like a science fair), @desmos art contests, Math history, cross-curricular events.

Discussion on reasoning, thinking, and modeling. Justifying their strategies with conceptual reasoning. - Having students discuss this with their parents. - Basically explanation at home not just skill practice.

Tasks where math is applied and shown to others

Reach out to state-level affiliates and help support their efforts while we ask for their support in our districts.

One of the best ways to change minds is for people to see deep thinking in action and reasoning and justification of thinking: allowing educators to “visit” classrooms where meaningful

Hyperdocs on a website to take families to math activities

mathematical discourse is taking place, sharing these experiences with parents in Math Nights, posting to social media.

Educate families on the importance of mathematics in the real world...for younger students, how do families use math at home? At work?

Interdisciplinary units of study...relate math to other disciplines - art, music, history, etc.

Clearly communicate goal is not memorization of facts in early elementary lessons

Shift the culture away from Testing to Thinking.

Welcoming families into our classrooms/schools to be a part of the learning.  
Visiting with families of schools so educators can see all sides of the learning. I.e - early/elementary/high school educators sharing learning/teaching so all perspectives are better understood.

Engaging with childhood care facilities as well so our youngest learners have an entry point when they begin formal schooling.

Engage stakeholders, families, students, and members of the community in math nights and math events.

Involve members of the business community and colleges in STEM days of exploration

-Schools and educators can implement the history and background of mathematics related to students' backgrounds (i.e introducing a small background on the different number systems that were used before base 10)

Through math connection to art

Use more technology and engage the community through activities and background

Engage families in tasks that are meaningful.

Newsletters

Parent/family education sessions - teach families how to do the math and how to promote math talk at home.

Social media - pictures and explanations of what students are doing

Involve families with ideas of how they can show/ work with their children, where, and how they use math in the real world. IE shopping, balancing a checkbook, planning a budget.

Parent and child day to sit in class

Develop a vertical alignment document

IEP goals/ objective alignment of skills to assist in this development

Engage students, families, and community through meaningful events.

Help families understand contemporary ways of teaching and learning maths

Instructing educators on how they can incorporate mathematical exercises throughout other subject areas.

Getting families involved in daily work/ assignments maximizing the social media and video platforms in communicating with parents and students, make follow-ups / at home

Connecting math via content integration for students to look at phenomena that inspires creativity and dialogue.

Professional Learning Circles with all educators (teachers, administrators, early childhood educators, educational assistants)

Involve parent and student in planning mathematics activities

Letting older students serve as tutors/helpers in math classes at lower grade levels