Teaching Mathematics with Technology

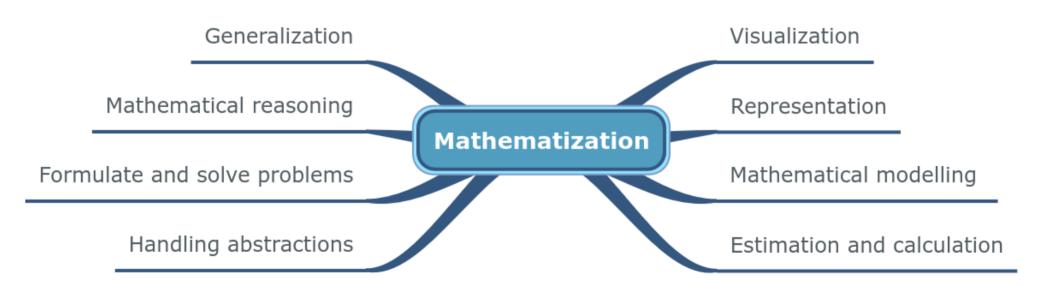


What are your perceptions and experiences of mathematics?

Why do you think we study mathematics in school?



The main goal of mathematics education in schools is the mathematisation of the child's thinking



Aims of mathematics education



- 1. Children learn to **enjoy** mathematics
- 2. Children see mathematics as something to discuss and work together
- 3. Children pose and solve meaningful problems
- 4. Children use **abstractions** to perceive relationships, to see structure, to reason, to argue the truth or falsity of statements
- 5. Teachers expect to engage every child in class
- Ref Vision of Mathematics Education NCF 2005 Position Paper (Maths)

Some possibilities with digital tools



- Visualization
- Dynamic construction allows development of an idea
- Possibilites for observing and generalizing
- Can create a peg for students' underlying (mis)conceptions to emerge, and hence for assessment also
- Students can explore a topic by themselves or in teams/ groups

Digital tools for teaching mathematics



- Geogebra
- PhET
- Robocompass
- TuxMath
- Mathsbot
- Mathigon