

Ideas from
“The Math(s) Fix: An Education Blueprint
for the AI Age”
by Conrad Wolfram (2020)

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Changing the Culture
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Mathematics, as it is currently taught in our educational system, is primarily focussed on hand-calculations.

The subject of mathematics that is taught in our schools is obsolete, and will disappear as a compulsory subject.

The mathematics curriculum requires more than reform—it needs to be completely replaced.

THE
MATH(S)



FIX

AN EDUCATION BLUEPRINT FOR THE AI AGE
CONRAD WOLFRAM

This confusion between calculating as a means to a problem-solving end and as an end in itself is the central and fundamental misunderstanding at the heart of today's maths education crisis. (p. 67)

What is Computational Thinking?

“Whatever the human aspect needs to be” (p. 77) at a given time, given the artificial intelligence available, to solve quantitative problems.

The 4-Step Maths/Computational Thinking Process

Step 1: Define the question you want to address

Step 2: Abstract to a form that is calculatable.

Step 3: Compute.

Step 4: Interpret. Relate your result to the original question.

Goals

More than just ability to solve problems, but also:

- know how to solve new problems using available tools and technology
- to think in new ways

Key Features

1. Outcomes are generic, not tied to content.
2. Content development starts with real-world problems, solved by real people, using modern technology. (p. 75)
3. Development works backwards from the problem context to the concepts and tools needed.
4. Order of content is based on complexity of problems not computational complexity.

Questions

What barriers would be created by such a technology-dependent approach?

What happens when a school can't afford the latest equipment?

Questions

What mathematics should we be teaching in the context of our modern and rapidly changing world?

Can we achieve what we want for our students through evolution of our curriculum, or do we need a revolution?