STORYTELLING AND SCAMP

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The "SCAMP" Project

Step 1 – Selecting a cultural artifact

Step 2 – A detailed description of the mathematics behind the artifact

Step 3 – A mathematical problem based on your chosen artifact, at a skill level appropriate to your class

Step 4 – Imagine a story, song, or poem that is centered on the artifact

High School Students' Projects

- Taegeukgi: binary notation, golden ratio, and integration
- Pottery: volume and integration
- Toothpaste: Pascal's principle
- Makgeolli: volume and integration

What should be taught in math?

- Don't tell students what to do and don't leave most of the reasons unresolved
- Give students the responsibility for inventing ways to solve mathematical problem
- Fourier did not develop Fourier series, and then decide to apply them to the study of heat flow; He set out to study heat problems, and when he had worked on this for a while he had Fourier series as one of the by-products (Davis, 1992)

Second Miscellaneous Item

- In one-page discussion paper, you should address your points of view on storytelling and creativity in terms of whether storytelling methods can be used or not for students' creativity in learning mathematics.
- You need to justify yourself why you think so step by step. That is, use specific reasons and examples to explain your reasoning in the paper. Then you can conclude whether you agree or disagree with the use of storytelling methods.

Reference

- Davis, R. B. (1992). Understanding "Understanding" *Journal of Mathematical Behavior, 11*, 225-241.


Q&A