

Design Tool 2.1: The Ideal STEM Class

Directions: Let's compare an "ideal" STEM class to your current situation. If you are not currently teaching a STEM class, pick a regular class that you are teaching.

Read some student goals for STEM classes in the left column. Then, in the right column, note to what extent this is going on in your STEM class, or in your regular classroom if you are not teaching STEM yet. Put a + if this is regularly happening; a dash – if it happens occasionally, and an X if it seldom happens.

In the ideal STEM class students would . . .	My current class
Understand how to approach and solve problems, using an engineering design process.	
Combine and apply important grade-level science and math content to solve problems.	
Tackle real-world issues, problems, and challenges.	
Dig into hands-on activities and exploration as I (the teacher) adopt a facilitator role.	
Engage in activities to help them become creative decision-makers and develop the ability to design imaginative, innovative solutions.	
Regard their class as a safe place where they are free to imagine, think outside the box, make mistakes, and take chances.	
Continue developing a sense of ethics and social conscience.	
Work together in small teams and use productive team behaviors.	
Build a mindset of continually improving and redesigning (persistence).	
Become technologically literate.	