Video Teacher's Guide

Hello teachers! This video lesson requires no pre-requisite knowledge of entrepreneurship or innovation. I feel that any high school student, or advanced middle school student, could participate in this video's learning activities and benefit from viewing the module. I hope that this video can inspire you and your students on the path to innovation and entrepreneurship.

There are many ways that this video can be used, and many ways that the breaks can be utilized. I have suggested some activities to be performed during the breaks, but I also urge you to use the video as it will suit you and your students best. I would love to hear back from you with the ways that you have incorporated the video into your classroom!

First Break:

Prior to the first break, I challenge the students to think about what the near accident I had has to do with inventiveness. Students can talk briefly with their neighbors or in small groups about how near-accidents and problems in general can be seen as opportunities to invent something to solve such problem or make situations less dangerous. During this break, I hope that students begin to perceive problems as opportunities.

Second Break:

During the second break, I suggest you give students a few minutes to brainstorm opportunities for innovation (these could be inspired by the video, or inspired by everyday life). What problems and hassles do students see or face daily? Encourage students to look at these as opportunities!

Third Break:

The third break can be used for further discussion of opportunities for invention. The discussion during this break can be more focused on innovations to aid those with physical limitations. We encourage you and your students to continue your discussions from today on forums on the BLOSSOMS website for this video!

Fourth Break:

By the fourth break, students have spent quite some time brainstorming ideas. We hope they will continue this brainstorming, and I suggest that you use this break to have students discuss ways that they can continue to be mindful of opportunities for innovation. Perhaps you could have each group or individual student choose one thing they will focus on or do daily that will help develop their perspective for engineering innovation.

Fifth Break:

The fifth break offers a pause for students to discuss possible ways to bring down the price of a driveway turntable. This is another "on-going" project and discussion, and we hope your classroom conversation continues on the BLOSSOMS website.

Sixth Break:

In the sixth break, students (in groups or on their own) have the opportunity to focus on one innovative idea. Students can begin to brainstorm a solution to their favorite problem by drawing prototypes and creating a vision for a feasible innovative solution. There is an additional resource referred to on the BLOSSOMS website (http://litemind.com/scamper/) that you could also choose to introduce to students at this point, or if you choose to do a more in-depth discussion and project later. This resource is used to stimulate creative, innovative thinking, especially in terms of innovation.

Final break:

Before the final break, students are challenged to create and give an Elevator Pitch for the device they just worked on prototyping. Some or all of the groups could then make their pitch to the class. You could even make this a homework assignment and have an elevator pitch contest in another class period.

If you and your students are really inspired by this video, and want to continue to develop innovation and entrepreneurial skills, I suggest that you use this video as a launching point for a more in depth project. If you visit the BLOSSOMS website for this video, you can find

additional resources for a long-term student project. If you choose to conduct this more indepth final project (or one of similar nature), I encourage you to upload the student projects to the forum on the BLOSSOMS website as well!

Thank you for inviting me into your classroom and I hope that you have enjoyed this video. I hope that you and your students continue your discussions and innovative thinking in your everyday lives and on the BLOSSOMS website in the future.

Diane Amanti

damanti@mit.edu

(Please feel free to contact me with any questions or comments!)