

Suggestions to Teachers for Adapting Resilience Resources

The resilience instructional materials evolved from a university program and are written for a teen to adult audience. As such, if the instruction is followed, you should expect to see statistically significant gains in general resilience pre-learning to post learning in groups of ten or more with the target audience.

The materials are consistent with recommendations by the World Health Organization (WHO) for suicide prevention. And, the focus on resilience is also a good measure for improving academic success. You, however, are specialists for your grade level instruction and the following goals and objectives are intended to assist you in adjustment of the materials. There are two parts: the first goal is to develop general resilience skills, and the second goal, building on the first goal, includes a technology component to explore resilience.

Goal: *Develop a resilience lesson plan for your grade level by adapting the resilience training materials covering the coping skills and social support.*

Objective: Review the Resilience videos and the workbook, A STEM Approach to Resilience.

Resources

Reference <https://resilienthacks.org/educator.html>, Workbook: A STEM Approach to Resilience, and download: [A STEM Approach to Resilience PDF](#)

Part 1 of 2, You a Mentor of Resilience video: <https://youtu.be/7p-0wCDBsrs>

Part 2 of 2, You a Mentor of Resilience video: <https://youtu.be/WEvt0cltcwg>

Objective: Recognize that there are minimally two resilience skills, Belief and Trust, as well as a breathing exercise, from the Strength skill, that could be incorporated into a lesson plan of your design. There are three exercises for each skill, specifically, Tell Your Story, Collaborate, and Own It.

Objective: Recognize that *Tell Your Story* exercise is intended to blend the current skill definition with a prior success experience where the learner has used something akin to the skill to deal with a challenge. So, we build on past learning and success to build self-efficacy (belief in self).

Objective: Recognize that *Collaborate* exercise is intended to: pair two or three learners and apply the resilience skill to a current challenge one of learners, or someone that they know, is facing; encourage dialog within the team; display the team's notes on how they would apply the skill to solve their challenge, and, finally, observe the solutions developed by other participant teams in the class. This builds empathy, trust, and recognizes the power of social support.

Objective: Recognize that *Own It* exercise is intended to encourage learners to redefine the skill into their own words, as well as comparatively examine the definitions of others in the class to assure understanding. This serves as a personal evaluation of understanding and a real application of the Adaptability skill.

Objective: Working with another person, do the Tell Your Story, Collaborate, and Own It exercises for the skill of Belief. Post your results for the Collaborate and Own It in a manner that assures a degree of anonymity. This is your hands-on opportunity to experience the resilience skill learning before developing a grade-appropriate lesson plan. The Trust exercises can also be explored — note that the repetition of doing the Tell Your Story, Collaborate, and Own It exercises is to build self-efficacy, problem solving skills, empathy, and recognize the effective-

ness of social support dealing with relevant challenges rather than coming to an ideal solution to a challenge.
(~35 minutes)

Objective: Given your grade level teaching expertise, develop a grade-appropriate lesson plan adapting the resilience materials so as to provide instruction for, minimally, Belief, Trust, and Strength's diaphragmatic breathing. You are encouraged to work in conjunction with someone who is also instructing a similar grade level. You are encouraged to consider the current health conditions that restrict social gatherings, such as the classroom, and how you could adapt and provide this resilience instruction to your students and, potentially, their families.

Resources

Use a lesson plan template of your preference. If desired, you can adapt the evaluation following each resilience skill, in the workbook, to meet your needs.

Goal: Develop a resilience lesson plan for your grade level by adapting the resilience training materials covering the STEM, resilience, and social support.

Objective: Working, in some manner, with another person, perform the computer setup by either using a Raspberry Pi computer, or alternatively, installing Node-RED on your home computer. Node-RED can be installed on Windows, Macintosh, and Linux computers.
(~10 minutes to install)

Resources

Reference <https://resilienthacks.org/educator.html>, Workbook: A STEM Approach to Resilience, and download: [A STEM Approach to Resilience PDF](#)

Then:

If using a Macintosh OS, How to Install Node-RED video: <https://youtu.be/9cHxLJq30AI>

If using a Windows OS, How to Install-RED video: <https://youtu.be/gJ1YUCIRc4s>

Then:

Part 1 of 3, STEM, Resilience, and Raspberry Pi Setup video: <https://youtu.be/NHP0Inh7pO0>

Part 2 of 3, STEM, Resilience, MQTT, and Node-RED video: <https://youtu.be/hLgvALvryHk>

Part 3 of 3, STEM, Resilience, Node-RED, and Internet of Things video: <https://youtu.be/zt0cl-olm528>

Objective: Working in some manner with another person, perform the Hello World exercise using Node-RED.

Objective: Working in some manner with another person, perform the IoT exercise using Node-RED.

Objective: Determine if and how you might adapt this STEM exercise to your grade level. You are encouraged to work in conjunction with someone who is also instructing a similar grade level. You are encouraged to consider the current health conditions that restrict social gatherings, such as the classroom, and how you could adapt and provide this STEM instruction to your students.

Objective: Post your lesson plan where others can learn from it.

Resources

GitHub: <https://github.com/HighDesert50/STEM-IoT-Resilience>