How to Support STEM Education in the General Education Classroom

Introduction:

Many Classroom Educators are not familiar with the term STEM or how and why to implement it within the general education classroom. As Instructional Designers and Technologists, it is essential that we understand what STEM is, why it is beneficial for students, and how we can support educators in implementation.

Participant Learning Outcomes

1. After completion of this learning module, participants will be able to define STEM Education.
2. Upon completion of this learning module, participants will be able to convey the importance of implementing STEM Education into the General Education Classrooms.
3. Upon completion of this learning module, participants will be able to suggest ways to implement STEM Education into a General Education Lesson.

Learning Object Titles and Descriptions

1. *What is STEM Education?*
   STEM Education refers to Science, Technology, Engineering, and Mathematics. This module section will provide a brief history of STEM Education and its purpose.

2. *Why is STEM Education Beneficial in the General Education Classroom?*
   STEM Education places an emphasis on computer science and problem solving. STEM teaches students to analyze problems, explore multiple solutions, support their findings, and relay information to others. These are all skills that will prove to be beneficial to students in conjunction with general education curriculums.

3. *How can STEM be Implemented in General Education Lessons?*
   This section will provide examples of how STEM education can be implemented in conjunction with already utilized curriculums. Learners will see how STEM can make lessons richer and provide for more meaningful learning.

4. *How can you support Educators in the Implementation of STEM?*

This section will provide resources for participants (Instructional Designers and Technologists) to share with their learners (educators). Participants will learn to navigate these resources and their various components.

Assessment Plan

1. Participants will be asked to create a digital graphic (Using PSD) that portrays the meaning of STEM. An example will be provided for participants to view before creating their own. These can later be used as a resource that can be shared with their learners.
2. Participants will complete a short answer response to the question, "Why should STEM Education be implemented in the General Education Classroom?" These responses will be posted to a discussion board. This will allow me as well as their peers to view their responses. This will help learners to review the information presented in this section and possibly be informed of components they may have missed on their own.
3. Participants will be asked to implement STEM components into a general education lesson plan. Participants will describe the original plan, note how they implemented STEM, and then describe how the addition made the lesson more meaningful and promoted better learner comprehension.
4. Participants will create an infographic that depicts the benefits and an example of utilizing STEM Education in conjunction with a general education curriculum.

Preferred Week to Deploy (check the calendar)

The week does not really matter to me. I would like to select a week in mid-to-late October if possible.