



Building Character Through Math and Science

Category: Character Education

Workshop Overview

Following is a general overview of this workshop, including desired participant outcomes, an explanation of the workshop’s alignment with Learning Forward Standards for Professional Learning, and resources that are included in print and electronic form.

Category: Character Education

Duration: Full workshop – 3 hours

Desired Outcomes:

Participants will...

- Identify the purpose of character education.
- Identify the educator’s part in character education.
- Apply strategies for incorporating character education into mathematics and science activities.

Learning Forward Standards for Professional Learning:

- **Leadership:** Requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.
- **Resources:** Requires prioritizing, monitoring, and coordinating resources for educator learning.
- **Data:** Uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.
- **Learning Designs:** Integrates theories, research, and models of human learning to achieve its intended outcomes.
- **Implementation:** Applies research on change and sustains support for implementation of professional learning for long term change.
- **Outcomes:** Aligns its outcomes with educator performance and student curriculum standards.

Resources in This Binder:

- Handouts:
 - Handout 1: Activities for Mathematics
 - Handout 2: Activities for Science
 - Handout 3: Activities for Mathematics and Science
 - Handout 4: Study Chart Sample
 - Workshop Agenda
 - Attendee Notes
 - 3-2-1 Evaluation Form
 - Certificate of Completion
- “Think About It” Exercise
- Ready, Set, Go Planning Activity





Topic Outline

Understanding the general flow of topics to be covered is an important part of giving a strong presentation. This allows the presenter(s) to lead effective group discussions and speak extemporaneously. Following are the main topics covered in this PowerPoint presentation. As you prepare to give the workshop, you may want to refer to this page often.



Main Topics:

1. Character Education
2. Activities for Mathematics
3. Activities for Science
4. Activities for Mathematics and Science

Subtopics:

1. Character Education

- a. What is Character Education?
- b. Who Should Teach Character Education?
- c. Why Should We Teach Character Education?
- d. How Could We Teach Character Education?
- e. Research Studies

2. Activities for Mathematics

- a. Why Mathematics?
- b. Activities for Building Character

3. Activities for Science

- a. Why Science?
- b. Activities for Building Character

4. Activities for Mathematics and Science

- a. Activities for Building Character

Presentation Outline



This outline is designed for you to see the PowerPoint presentation at a glance. Note that slide numbers and the approximate amount of time needed per slide are shown in the right two columns. **The times in bold print show the approximate total time needed for that topic, which includes the approximate times for the activities, shown in parentheses.** You might consider keeping this page within reach during the presentation.

Section of Presentation	Slide #	Timing (mins)
Getting Started		
Introduce self, co-teacher, participants	1-2	
Explain materials issued to participants		
Cover objectives (from Workshop Overview)	2	10
Topic 1 – Character Education	3-9	25
Activity – Quick Write	9	(5)
Topic 2 – Activities for Mathematics	10-16	35
Discussion Point – Are these mathematics activities effective for emphasizing their intended traits?	16	(5)
Break		
Topic 3 – Activities for Science	17-21	25
Discussion Point – Are these science activities effective for emphasizing their intended traits?	21	(5)
Topic 4 – Activities for Mathematics and Science	22-29	60
Activity – Into Action	29	(25)
Closing Thoughts	30	5
Total of 2 hours and 40 minutes (not including break)		

Helpful tip!

This workshop can be broken up into shorter sessions so that you can adapt the presentation according to your time constraints.

“Think About It” Exercise

Have staff complete this exercise to begin implementing what they learned during the workshop. Distribute this document to staff by attaching the file to the Next Day Follow-Up Email, or make copies for the staff.



1. Circle the activities in the list below that you have used in your classroom for character-building:

Assessment Portfolios
 Associating Newspaper Headlines and Photos
 Caring for a Garden
 Class Cleanup
 Conquering the “I Can’t’s”
 Contributions to Society
 Hot Chocolate for Two
 Managing Classroom Discussion
 Paper Chains
 Skill Components and Assignment Completion
 Study Charts
 Wasted Time

2. Are there any aspects of character-building math and science activities that the workshop did not cover? What are they, and how do you propose handling these aspects?

3. Consider situations outside of the classroom where you could apply the character education activities you have learned. How are these situations similar to and different than situations in the classroom?
