



Course Follow-up Activities

Linear Equations: A Hands-on Method for Teaching the Connections Among Equations, Tables, and Graphs

Note: It is recommended that participants in the video course complete follow-up activities to deepen their knowledge and skills. When these activities are completed in accordance with local staff development guidelines, participants may be able to earn additional professional development credit. Contact your local staff development office for determining how you might receive credit for completing the video program and additional credit for completing follow-up activities.

You will need to print out **all the handouts** to use with these follow-up activities.

Activity 1: Share Presentation with Peers

A Study Group or work team is a great way to share information and to learn new things in a collaborative way. This structure brings a greater professionalism to the group. Each person grows from the experiment if they contribute to the total outcome of the process, which should be to increase teacher effectiveness, knowledge, and skill. You may access web links to learn more about forming study groups by going to the resources page for this program.

The presentation focused on ways to teach the concept of linear equations but also addressed standards and benchmarks for the displaying information in graphs, charts, and tables. The presentation also uses technology to provide modeling experiences for students to use to see how the experience of the first flights happened and other resources to help them develop a point of reference to something in their own life experience that relates to Orville and Wilbur Wright's Great Adventure.

The presentation provided information on using the concept of the TV program Crime Scene Investigation – CSI to design a course that explores science and math content areas by using investigative methods. Student involvement and participation were outcomes of the use of these methods in the presenter's classrooms. Several activities were shared and some were experienced by the participants in the video. Sharing training experiences with peers is a great way to practice what you have learned as well as internalizing the strategies that were shown.

Use the PowerPoint and the handout pages and make the slide presentation to a group of your peers as part of a study group activity. Print out the handouts provided on this website for this program and choose one of the activities to replicate with your peers. Follow the process demonstrated in the video and replicate the Frog Hop To It Activity or the Flights of the Wright Brothers Activity.

If you choose to do the Flight activity you will need to get the URL from the additional resources page located in the supplemental web page for this presentation.

The Wright Brothers Flight Simulations used in the presentation
<http://dsc.discovery.com/convergence/wright/flights/flights.html>

You may print out the slide pages of those particular activities as handouts in your session. You may want to use a chart and stand to record participant responses to the questions about the outcomes. Make comparison and talk about what responses are gathered as a group. Please answer the questions for Activity 1 and share the results of this session with your professional development director as part of your follow-up activity.

Activity 1 Questions:

1. Describe the activity you selected and detail how you prepared and conducted the activity.
2. Describe the degree participants were able to replicate your instructions in completing the activity.
3. What were their greatest challenges?
4. What was the outcome of the session you conducted?

Activity 2: Web Exploration

There are several web links mentioned in the presentation and listed on the resource pages of this course website. Search for some resources or materials from these sites and describe how you would develop a lesson activity using those resources to support your strategy of using models and hands-on activities to teach linear equations in the classroom.

Describe your lesson by elaborating on:

Lesson materials used and source web site

Objective of the lesson

Strategies that will be used

Assessment techniques that will be used

Ways you can build on this lesson for further growth in student understanding

If you are able to implement this lesson please describe the results.

When completing all the activities, submit your materials to your professional development director for consideration of points for recertification purposes or professional development credit.