Introduction

What is Discovery Learning?

Inquiry-based learning encourages learners to build on past experiences, knowledge, use their intuition, imagination, and creativity, and search for new information to discover facts, correlations, and new truths. (Elmore, 2008)

Discovery learning is an inquiry-based instruction that encourages learners to discover facts and relationships for themselves. (Learning Theories.com)

Basics:
- Problem-inquiry-based solving through active learning, probing, and taking risks
- Learners control their learning
- Integrate and connect with old knowledge in the construction of new
- Process versus content; learners learn to analyze and interpret information rather than memorizing it
- Failure is a great teacher

Guidelines:
- Manipulate the content in ways that make the learner think and make choices
- Don’t have too much reading; learners skim over and don’t absorb the information
- Activities are for exploration and discovery, not testing
- Immediate feedback
- Making best “guesses” encouraged
- Modules need to anticipate questions learners may have, provide answers, guidelines, and feedback

What is Trickle Up Education?

The strategy of educating children about personal and public safety issues to first instill good habits in them, but also with the expectation that they will in turn influence their parents and other adults to adopt the same good habits. (Helping the education they transmitted “trickle up” in society in this way.)

What is Discovery Learning?

Discovery learning is a type of teaching that is based on the student finding things out for themselves, looking into problems, and asking questions. (Tech & Learning.com)
Discovery Learning Basics

Learners:

- Control their learning
- Analyze and interpret information rather than memorizing
- Integrate and connect old knowledge in the construction of new
- Problem-solve through active learning, probing, and taking risks
- Have opportunities to learn through failure

What is Biosecurity and Why Should We Care?

Activity 1-2
Activity 4

Discovery Learning Guidelines

Chunk content into manageable amounts
Discovery Learning Guidelines

Make the learner think and make choices.

Discovery Learning Guidelines

Provide activities for exploration and discovery, not testing.

Discovery Learning Guidelines

Encourage guessing.

Draw lines connecting each word to a picture. Roll over the images and words to learn more.
Discovery Learning Guidelines

Give immediate feedback

Your Mission: Find potential sources of disease transmission risk

There has been an animal disease outbreak in a neighboring state. It seems to be contagious, various types of farm animals are sick and some are dying. It’s costing farmers a lot of money due to the loss of sales and the expense of caring for sick animals. This has the agricultural community worried about their animals and businesses.

To learn more about biosecurity, you have volunteered to visit a local dairy and look for ways a contagious disease could enter the farm. You will prepare a report listing the potential sources of disease transmission and why each one is a risk.
Complete the Activity with your Group

Activity 1
Activity 2
Activity 3
Activity 4
Activity 5
Activity 6
Activity 7
Activity 8

Share Out

What was the type and purpose of your activity?
What old knowledge did you need to complete the activity?
What new knowledge did you acquire?
How Can You Use Discovery Learning?

In small groups, discuss ideas

Share Out

Epilogue

Epilogue: Six Months Later
What do we mean by "Trickle Up" education?

Thanks!

Any questions?

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