In The Classroom

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GK-12
The Classroom

Mr. Kittel  Mr. Aguiar
What I put in/What I got out

What I Brought to the Classroom
- Extra hands
- Additional knowledge on topics covered
- University-based Scientific Methods/Instrumentation

What I Took Away From the Classroom
- Communicating Science to a general audience
- Teaching Methods
- Project development
“Where Do Plants Get Their Matter?”

Giant Sequoia Tree

The giant sequoia tree is one of the largest trees on earth. It starts as a small seedling and grows into an enormous tree. Five children can stretch their arms across the width of the trunk of one of the large sequoia trees.

Where did most of the matter that makes up the wood and leaves of this huge tree originally come from? Circle the best answer.

A sunlight  
B water  
C soil  
D carbon dioxide  
E oxygen  
F minerals  
G chlorophyll

Explain your thinking. How did you decide where most of the matter that makes up this tree came from?

(Uncovering Students Ideas In Science, Vol. 2)
Our Strategy on How to Change Their Alternative Conceptions

- Grow plants in conditions absent of soil.
- Stress how sunlight is energy and NOT matter
- Spliced this with the ‘Conservation of Matter’ concept.
Before and After!

Changes In Class Conceptions

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Percentage of Class That was Correct

% Right Before
% Right After

Periods
Acknowledgements

- GK-12 Fellows,
  Project Leaders,
  Teachers

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And Thank You!