Carnegie Mellon University
Online Learning Initiative

Accelerating Sustainability
Online Learning Challenges

• No eye contact...

• Or body language...

• Can’t raise your hand...

• Crib notes...

• Also about communication

• Not only about chemistry
Why Do This?

• Chemists are trained to create remarkable molecules ...

• That do remarkable things ...

• But without much thought about what they may do to their environment or human health ...

• Green, sustainable science is all about designing the hazards out of molecules and chemical processes from the get go.
Accelerating the Process

Traditional Approach
Accelerating the Process
Virtual Approach

- Go online and use the world wide web and social media as a learning tool that can ...
  - Accelerate changing minds
  - By reaching more students and chemists
  - Complement traditional teaching & training
  - Generate increased collaboration and communication
  - Generally advance the field
What We’ve Been Up To ...

Have created this development site: www.igsdev.net

It’s still under construction.....

And it’s a big undertaking...
Online Presentation

This part of the presentation will walk through the “learning engine” online.
Moving Ahead

- Change is necessary
- Change must come in many flavors and from many directions
- This is one way we hope to amplify the change that is needed
- A long time ago ...
Moving Ahead

... a great scientist named Archimedes said...

“Give me a lever, I will move the world...”