

**2006 Pennsylvania's Governor's Institute for Technology Education**  
**California University of Pennsylvania**  
**July 23<sup>rd</sup> – 28<sup>th</sup>**  
**Secondary Strand Pre-Institute Assignment Requirement**

In order to provide evidence that Technology Education content supports the No Child Left Behind legislation, every Technology Education Teacher should become familiar with state initiatives created to strengthen student achievement. The Pennsylvania Science and Technology Academic Standards provide content guidelines for science and technology education teachers in the state of Pennsylvania. In order for technology education teachers to be an invested party in the support of the No Child Left Behind legislation, it is important that technology education content in classroom instruction is aligned to the state and national standards. As a pre-institute assignment for the Governor's Institute for Technology Education, each participant is asked to review the Science and Technology Academic standards and create a standards based learning activity.

**Assignment**

*Rewrite a learning activity that is currently implemented in your program to effectively integrate Pennsylvania Science and Technology Standards.*

**Assignment Requirements**

The following items are to be included in the assignment:

- Grade level
- At least 2 cited standards referenced from the Pennsylvania Science and Technology Standards
- At least 2 cited standards referenced from the Standards for Technological Literacy
- A design brief
- All materials required
- An assessment strategy/approach used to measure student achievement.

Use the attached format to complete the assignment.

**Submission Requirements**

Each Governor's Institute participant is required to complete 5 hours of pre-Institute work. The participants of the Governor's Institute of Technology Education should submit an electronic version of the assignment by July 16<sup>th</sup> to Katherine Weber at [weber@cup.edu](mailto:weber@cup.edu). A CD will be made prior to the Institute containing all the assignments and will be disseminated at the Institute to each secondary teacher attending the Institute.

**Resources**

Pennsylvania Academic Standards for Science and Technology  
<http://www.pde.state.pa.us/k12/lib/k12/scitech.pdf>

Standards for Technological Literacy  
<http://www.iteaconnect.org/TAA/Publications/STL/STLMainPage.htm>

## Format for Pre-Institute Assignment

**Name:**

**Email:**

**Phone:**

**School District:**

**Learning Activity Title:**

**Level:**

**Pennsylvania Science and Technology Standards:**

**Standards for Technological Literacy:**

### **Background Information**

State any background information that may be helpful to other teachers to successfully conduct this activity.

### **Tools and Materials**

List all necessary tools and materials needed to successfully complete this activity

### **Student Adaptations**

List the student adaptations that may need to be considered to ensure success in special needs students.

### **Design Brief**

The contents of the Design Brief should connect to the anchors and standards you have selected as well include the following: (taken directly from the CATTs-Consortium booklet)

- *Context or Situation* - describes a real-life situation where a problem occurs or where a want or need can be met.
- *Need or Challenge* - the challenge statement gives a clear focus to the design problem, it describes how the needs of a situation may be met without giving a solution to solve the problem.
- *Criteria* - the overall desired goals of the design brief, ie. What should be accomplished at the end, a working model, presentation etc.
- *Constraints* – what limitations are imposed on the design, any limitations on equipment

- *Evaluation or Testing* - this statement provides guidelines to assist students if their solution solves the problem and meet the criteria outlined.

**Assessment**

List several methods of assessment that could be used to measure student achievement.

**Resources**

List all resources needed to conduct the activity.

Yes, I grant permission to include my contact information on the materials I submit, which will be disseminated through the Institute.

No, I prefer that my contact information was not included on the materials I submit.

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Signature

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Date

\* *An electronic signature is acceptable; type your name on the signature line.*