# It's Science Project time!



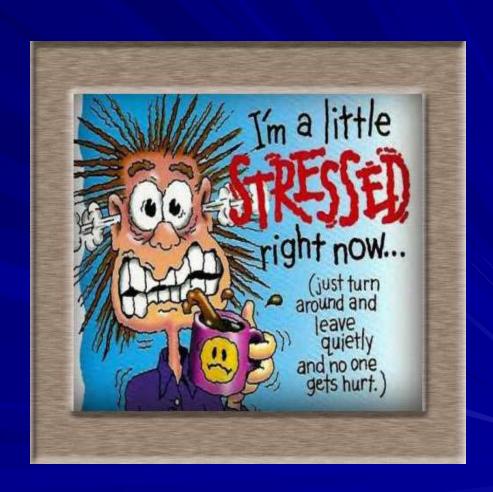
Tools to Get Your Students Ready!



Training Guide
Secondary Science
Clayton County Public Schools

#### The Science Fair is in the air!

With proper planning and communication, Science Fair time is not so bad!



## Science Project Expectations

- •For each grade level, what are your expectations for your students?
- Are all students be expected to complete an individual science project?
   Will you allow group projects?
- •Will all students need to share the same experience with science projects?

#### Where should I start?

#### Plan, Plan, and Plan again!

- This should be done <u>before</u> students are given any information!
- -Work with your department and team to determine your course of action.

Did I

say

plan?

- Decide on critical dates library or
   Internet research, laptop cart.
- Be sure to consult with Connections teachers for assistance.

### **Next Steps?**



Students should begin to hear information about Science Projects as soon as possible.

Plan to set some time aside from your daily lessons to formally introduce science projects. Make it a big deal!

Be prepared to send home an official parent letter and calendar (*samples included*).

# Full speed ahead!



Most students will become really anxious once they get information about the project. Many may already have an idea (sometimes way off base) for what they want to do.

This is the best time to review with them the Scientific Method (using a standards-based activity) and even show a short video on choosing a science project.

# You are going to do what!

Regardless of the grade level or ability level, topics should be approved by you!

A list of "off-limit" project should be established based on level and ISEF rules.

Have students include a brief description of what they plan to do before you approve.

Be sure to explain the difference between a science project and a demonstration or activity.

### Research



Background research is a vital part of a Science Project.

Teachers should walk students through this process.

Employ the assistance of your Literacy teachers and your Media Specialist.

Be sure to allot sufficient time for research.

Agree upon a response to "I don't have a computer at home".



### Experimentation



All experimentation should be done at home unless you have given student permission to work after school. (Refer to ISEF Rules)

Require students to submit their Experimental Plan for approval before experimentation phase begins.

All students who aspire to participate in regional fair must conduct an experiment and use a Log Book (per ISEF).

### **Display Boards**

Students will need to see examples of how a project display board should look.

If you do not have a previous student's project to display, create one that shows the components.

Work with your administration to assist students who are financially unable to purchase a display board. Title I funds can be used to purchase boards (*Principal's discretion*).

Consider recycling old boards.

Consider alternate methods to displays projects at the classroom level, i.e- glogster, prezi, etc.

### **Presentation Day**

As you teach using the GPS, allow students ample opportunities to speak in front of their peers. Although students may still be nervous, they would have had practice.

As students present, consider what your other students are doing. Could they possibly use a rubric to evaluate their peers projects?

Make a big deal out of it!

### The School Science Fair

Students whose projects are selected should be notified ASAP.

Your Science Fair
Coordinator will work
closely with you to
prepare your selected
students for the School
Fair.



### Regional and State Fairs

Students should be encouraged to strive to be selected to compete on the Regional and State Level.

Consider showing examples of projects that have gone to these fairs.

#### **Additional Resources**

http://www.sciencebuddies.org/mentoring/scienceprojects.shtml

http://www.all-science-fair-projects.com/categoryO.html

http://school.discoveryeducation.com/sciencefaircentral/

http://www.elmers.com/products/sciencefair/index.asp

http://www.sciencenewsforkids.org/pages/sciencefairzone/studenttips.asp

http://www.scifair.org/dr.shawns4fundamentalrules.html

http://www.ri.net/schools/East\_Greenwich/Cole/sciencefair.html

http://www.societyforscience.org/Page.aspx?pid=310

http://www.societyforscience.org/Page.aspx?pid=312