

What have I gotten myself into?

As your site's science fair coordinator, you have chosen to be a leader! As such, you will be asked a lot of questions. Hopefully this handbook will help guide you to some answers. Coordinating a science fair for your school can be a big job but can be extremely rewarding. Your students love to do science. Have fun with them and their teachers.

What should I do first? Second? Third? Etc

Use the following checklist to help get you started:

- Set up a meeting with teachers who will be participating in the science fair.
- Establish a place and time for the science fair (before mid-February)
- Devise a system for project check-in, storage, display and take-down.
- Get volunteers/PTO to help with various tasks.
- Publicize the fair to parents and community
- Order ribbons, certificates and refreshments (if desired).
- After fair is over, send thank you notes.
- Work with winning entries to successfully enter the district science fair.

Great checklist. How do I do these things?

The rest of the handbook corresponds directly to this checklist. The details in the following pages are provided to help guide you. Thanks again for being a leader and best wishes for a successful science fair.

Initial meeting with the teachers

Establish an agenda before the meeting. This information could be presented at a regularly scheduled faculty meeting. Although many additional questions may come up try to stick to the agenda. The agenda should be created by you and fit the needs of your site. Below is an example of items that may need to be addressed at the first meeting.

- Timeline for science fair projects (see suggested overall timeline and classroom timeline).
- Rules and guidelines for the projects.
- Hierarchy for student research proposals.
- Delegation of tasks.

These are sample timelines that are to be used as suggestions. The timeline is ultimately up to your site.

The following timelines are for sites that integrate the science fair project yearlong:

Coordinators timeline

Tasks to be completed	Approximate time required to complete task	Due date
Students select a topic of interest.	½ week	First week of October
Students gather information on topic and devise a question.	1 week	Third week of October
Students submit their research proposal to teachers to review. <i>(See research proposal worksheet).</i>	1 week	Last week of October
Teachers submit all reviewed research proposals to their science fair coordinators. <i>(Mark and place questionable ones on top.)</i>	1 week	First week of November
Science fair coordinators submit all research proposals to IRC for science cadre review.	1 week	Second week of November
Students proceed with science fair projects according to teacher's schedule. <i>(See suggested schedule)</i>	5 weeks	Third week of December
Display boards to be completed and reviewed.	1 week	Third week of January
Set up science fair displays.	Few hours	Day of science fair
Judging of projects.	Few hours	Day of science fair
Public viewing and awards ceremony.	Few hours	Day of science fair
Winners to HISEF.	Few hours	End of February

Classroom timeline:

TASK	Dates	Resource(s)
Help students choose a topic of interest and do research.	Last week of September to first week of October <i>(They may want to continue researching on their own over fall intersession)</i>	
Help students to develop their question. (Individual conferences recommended).	Third week of October	
Help students write a research proposal. (Encourage parent involvement).	Last week of October	
Thoroughly review research proposal to ensure safety/ethical issues are being met.	First week of November	
Work with students to revise proposal if needed.	First week of November	
Turn ALL proposals into science fair coordinator. <i>(Mark and place questionable ones on top).</i>	First week of November	
Set up individual conferences concerning project needs <i>(materials, fine tuning a procedure, etc.)</i>	Third to last week of November	
Help students perform their experiments.	First two weeks of December	
Help students write their reports. <i>(Power pt/ research paper)</i>	Third week of December	
Help students create their display boards and finalize their projects.	Second and third week of January	
Local Science Fair		
HISEF	End of February	
CARSEF <i>(optional: site decision/responsibility)</i>		

The following timeline is for sites that prefer the science fair project to be a unit of study.

Science Fair Tentative Schedule
(Submitted by Conley Elementary)

First week of January	Review standards and expectations for the project. Become familiar with Internet policies/permission slips. Whole class experiments to model the project
Second week of January	Finish whole-class modeling of the project. Small group experiments.
Third week of January	Project topics chosen. Development of ideas, purposes, etc. Research proposal sheet submitted. Approval/disapproval reported back
Fourth week of January	Students research topics. Gather materials. Begin experiments. Begin journals. Start writing reports
First week of February	Continue with journals by recording observations. Make measurements/add to journals. Gather data. Begin preliminary conclusions
Second week of February	Continue with journals. Organize results. Make charts and graphs
Third week of February	Finalize charts, graphs, results. Draw conclusions. Finalize reports. Construct exhibits
Fourth week of February	Oral presentations to class.

The following timeline is for middle school and the science fair project is incorporated yearlong.

Submitted by Santan k-8 for middle school

Task to be completed	Due date
Question Proposals	Second week of November
Hypothesis/Introductory Paragraph	Third week of November
Background Research	Last week of November
Experimental Design	First week of December
Data Collection Format	Second week of December
First Data Check	Third week of December
Second Data Check	Second week of January
Data Analysis	Third week of January
Rough Draft of Paper	Last week of January
Final Projects	Second week of February

Rules and guidelines for projects

- a. Before beginning any project, a proposal must be submitted to the teacher for approval. Use the Research Proposal Worksheet. (Suggested due date is Oct. 31)
- b. Use the following website <http://www.sciserv.org/isef/> and go to Rules Wizard link for questionable projects. For most projects, simply use the Do's and Don't list provided in the teacher handbook.
- c. Students in grades 4-8 must develop their projects either individually or in teams of two or three students. The research and display MUST be entirely the work of the student(s). Projects are to be done at the school. However, students may seek advice from teachers and/or mentors. Parents, siblings, etc. must not complete the project or exhibit for the student(s).
- d. Students in K-3 will develop class projects to be displayed at the site fairs.
- e. Safety precautions must be observed during any science project.
- f. Students may only enter one project.
- g. All exhibits must be durable and safe. Research papers and/or data logs should be the only items submitted with the display boards.
- h. Display boards should be no larger than
76 cm (30 in.) deep
122 cm (48 in.) wide
274 cm (108 in.) high including the display table
- i. Display boards cannot have any student's names or faces on the front.
- j. The student's name, project category, school, grade, and teacher's name must appear on the back of the project. Use the project labels in the teacher handbook.
- k. Eligibility for HISEF:
 - A total of four (4) 5th grade projects may be chosen to enter HISEF per site.
 - A total of four (4) 6th grade projects or inventions may be chosen to enter HISEF per site. In addition, each school may enter a mousetrap car created by a 6th grade team to compete at HISEF.
 - A total of three (3) 7th and 8th grade projects per category (see below) may be chosen to enter HISEF per site. (This number not to exceed 27).

Summary

Grades K - 3	Develop a class project with the assistance of their teacher and mentors to be displayed at site fairs.
4th Graders	Develop a science fair project with display board for site fair individually or in teams of 2-3.
5th Graders	Develop a science fair project with display board for site fair and eligibility for HISEF. May work individually or in teams of 2-3.
6th Graders	May choose a science fair project, invention, or a mousetrap car; all for eligibility at HISEF. May work individually or in teams of 2-3. An abstract should be included.
7th and 8th Graders	May choose a mousetrap car, or a project from one of the following categories: Physical Science, Health and Medicine, Earth and Space, Environmental Science, Life Science, Behavioral Science, Math and Computer Science, Inventions

Hierarchy for Student Proposals

1. Students must submit a proposal for research to the teacher. Have students use the research proposal worksheet.
2. Teachers are to be the first line of “defense” against dangerous science and/or bad science. Sometimes this can be difficult so contact your science fair coordinator if needed.
3. Teachers are to turn in all research proposals to the site Science Fair Coordinator. To make their life easier, please mark and place any questionable research plans on top of the pile.
4. The Science Fair Coordinators will decide whether or not a questionable project can continue. They have the option of consulting with district science cadre.
5. The Science Fair Coordinators will then turn in all research proposals to the science cadre for a final review.

Delegation of tasks (not all inclusive)

TASK DESCRIPTION	DATE	PERSON(S) RESPONSIBLE
Volunteer round-up		
Facilities		
Project Check-in		
Project tear down		
Publicity		
Thank you notes		
Scheduling issues		
Refreshments		
PTO contact		

Establish a time and place for the science fair

This may need to be done a year in advance at some sites. Also curriculum mapping may provide a date for implementation of the local science fair. This decision needs to be made with your administrator. Please note that names of students who will be competing in the district science fair are required by mid- February.

Devise a system for project check-in, storage, display and removal

Check-in

- Prepare a list of all projects to be displayed and the category for which they belong.
- You will want to group projects according to the categories (see below) and possibly age groups.
- Figure out how you will want the room to look.
 - Determine how many projects will fit on a table.
 - Determine number of tables needed.
 - Make a rough map of how the room is to be arranged.
- Provide teachers with a written plan of how you would like them to check-in their projects.
- At check-in be sure to verify that ALL projects have a label on the back of the project stating the student's name, teacher, school, grade and category.

Display

- Student projects consist of a display board, research paper and logbook ONLY!
- Be sure that the display boards do not have faces or names on the front of the board.
- Be sure the project is placed in the right category and age group.

Categories are:

Behavioral/social sciences, Environmental/ecology, Life Science, Health and medicine, Math and computers, Earth and Space, Physical sciences, Engineering/inventions (Mousetrap Car Design for grades 6-8 ONLY-teams of 3)

Take-down (removal)

- Determine when and how winning projects will be announced.
- Devise a plan for students to take home their projects or how they will be re-distributed to the students/teachers.

Get volunteers/PTO to help with various tasks

Volunteers will be needed to help serve as mentors for the students, judge projects and work at the event.

- Make a contact with your site's PTO. Give them an informational flyer about the science fair and discuss possible ways that they can help.
- Discuss with your administrator ways to advertise the need for science fair volunteers at your site. (ex. Front desk sign up sheet, email to teachers, organizations, etc.)
- The science cadre will help with judges.
- It helps if you have a specific schedules set up with time slots.

Publicize the fair to parents and community

The key here is to delegate but only after you and your administrator have previewed the flyers, brochures, emails, etc.

Order ribbons, certificates and refreshments (if desired)

- Certificates and/or ribbons should be ordered in advance if your site decides to present them.
- Refreshments are optional as well.
- Prizes and t-shirts are optional as well (and expensive but not impossible).

After fair is over, send thank you notes.

- Be sure to get all of the judges home or work addresses and phone numbers on a single sign-up sheet. Have them sign in before the going over the rubric with them.
- The volunteer sign-up sheet should contain the addresses and phone numbers.
- Don't forget about delegating.

Work with winning entries to successfully enter district science fair.

Closer to the time of the district fair, you will be sent material concerning registration for HISEF.

THANKS FOR TAKING ON THIS RESPONSIBILITY!
BEST WISHES FOR A SUCCESSFUL AND FUN SCIENCE FAIR!

