

# Family Science Workshop

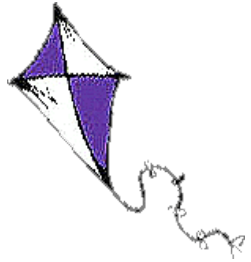
Effectively Engaging Parents  
in Science Learning

November 20, 2008

Workshop Presenters:

Maddie Ziegler and Chris Wallace  
Foundation for Family Science  
[www.familyscience.org](http://www.familyscience.org)





# When Parents Are Partners

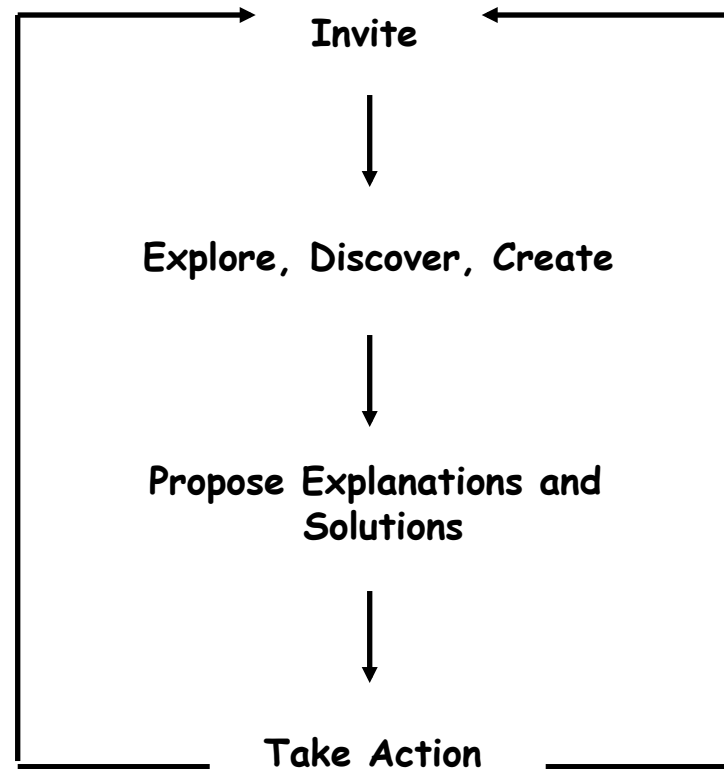
When parents are partners  
Lo and behold -  
Schools and their teachers  
New wings will unfold  
Community spirit  
Will rise to new heights  
When parents are partners  
Things tend to go right.

When parents are partners  
Research does show  
Test scores improve  
Student learning does grow  
Everyone benefits  
From breath of fresh air  
When parents are partners  
Kids know we care.

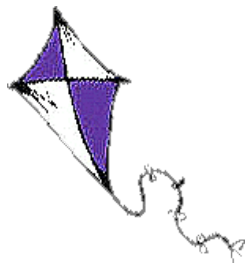
*Parent Partners* by Jacqueline Barber



# INVITATIONAL LEARNING MODEL



Adapted From: *Science and Technology for the Middle Years: Frameworks for Curriculum and Instruction*,  
National Center for Improving Science Education, 1990.

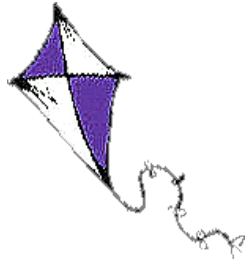


"There's no use in trying," Alice said, "one can't believe impossible things."

"I daresay you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour each day. Why, sometimes I've believed as many as six impossible things before breakfast."

Lewis Carroll  
*Alice in Wonderland*

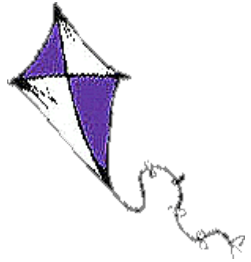




# Research on Parental Engagement

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- 70% of waking hours outside of school. (Clark, R.M., 1990)
- Greater parental involvement results in increased confidence as science learners. (Harvard Family Research Project)
- Most consistent predictors of academic achievement and social adjustment are parent expectations. (Reynolds, et al)
- Family participation in education was twice as predictive of student academic success as family socioeconomic status. (Walberg, 1984)
- Lack of parental involvement is the biggest problem facing public schools. (Rose, Gallup & Elam, 1997)

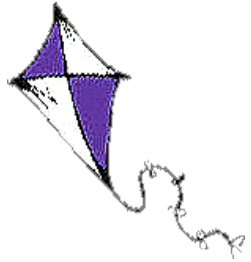


# Impact of Parental Engagement

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Decades of research show that when parents are involved students have:

- Higher grades, test scores and graduation rates
- Better school attendance
- Increased motivation, better self-esteem
- Lower rates of suspension
- Decreased use of drugs and alcohol
- Fewer instances of violent behavior



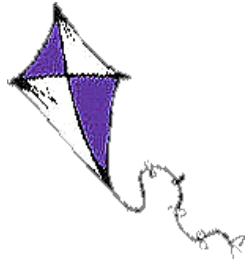
# Science Learning Tips for Parents

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1. Encourage questions
2. Make science a hands-on experience
3. Practice using inquiry skills everyday
4. Teach problem-solving skills
5. Enjoy the creative side of science
6. Spend time talking and listening to your children
7. Support and encourage your children as science learners







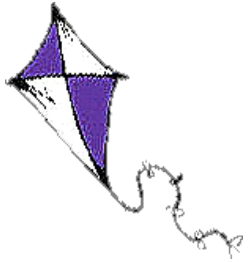
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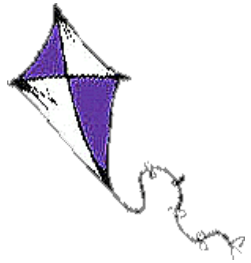
8. Encourage good study habits
9. Use math, literature and real world events
10. Demonstrate how science improves the way we live
11. Make connections between schooling and future career options and choices
12. Provide access to tools for learning
13. Challenge traditional stereotypes







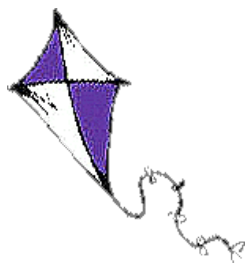
What types of parental  
engagement programs have  
worked for you?



# Developing Culturally Sensitive Programs

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1. Welcoming Families and Building Trust
2. Once is Not Enough
3. Grounding the Program on Values Shared
4. Providing Culturally Attuned Programs and Activities
5. Utilizing Program Staff Who Are Culturally Competent
6. Meet on Home Turf
7. Use a Variety of Communication Channels



## **Contact Information**

Chris Wallace  
Foundation for Family Science  
4614 SW Kelly Ave, Suite 100  
Portland, Oregon  
503-245-2102 [cwallace@davidheil.com](mailto:cwallace@davidheil.com)  
**[www.familyscience.org](http://www.familyscience.org)**

*Foundation for Family Science*