Ford PAS
National Professional Development Theme Workshop
Working Toward Sustainability
July 26-29, 2009

Goals

- Gain in-depth experience with the academically rigorous, interdisciplinary Ford PAS science modules
- Learn strategies for linking classroom learning and academic content with real-world applications
- Explore techniques for helping students develop the 21st-century skills they will need in post-secondary education and the workplace
- Experience inquiry- and project-based approaches to teaching and learning
- Explore the connections between the study of sustainable energy and traditional academic subjects such as chemistry, biology, and physics
- Learn about implementation options and begin planning for the use of Ford PAS in your school or region
- Become more familiar with Ford PAS and join the Ford PAS professional learning community

Agenda

Day 1 (Sunday, July 26)

Time	Session	Location
1:45	Meet in Dearborn Inn Lobby (Shuttle transportation to event)	
2:00 – 2:10	Registration and Refreshments	Main room
2:10 – 3:25	Introduction	Main room
3:25 – 4:15	Hands-On Session: Skills for Science Success: Ford PAS Teaching and Learning Pillars *We All Run on Energy,* **Activity 2: Why Should We Change?**	Teaching lab
4:15 – 4:30	BREAK	Main room
4:30 – 5:30	Hands-On Session: Skills for Science Success: Ford PAS Teaching and Learning Pillars (cont.)	Teaching lab
5:30 – 6:00	Planning to Implement Ford PAS: Introduction and Questions	Main room
6:00 – 6:30	Wrap-Up: End of Day Reflections and Homework Assignments	Main room
6:30 – 8:00	Picnic Dinner	
8:00	Shuttle transportation to hotel	

Homework

For session on Using Literacy Strategies:
- Read **RDG 5 Reading Strategies to Use on Your Own**.
- Read excerpts from *Do I Really Have to Teach Reading? Content Comprehension, Grades 6–12* by Cris Tovani.
- Read excerpts from *Improving Adolescent Literacy: Effective Classroom and Intervention Practices: A Practice Guide* by IES.

For session on Inquiry:
- Read "Reforming Cookbook Labs" by Erin Peters.
- Group A: Read **Teacher Information: Electrolysis of Water** and the first 1½ pages of **Decomposing Water**.
- Group B: Read **Law-Abiding Gases** and **Gas Laws Expanded**.

For session on Coordinated Learning Experiences (CLEs):
- Read CLE packet (informational materials about guest speaker and his/her company, sample questions).
- Write three or four questions you would like to ask the guest speaker.

Dress requirements for Monday

The science lab we are using on Monday has dress requirements for safety. On Monday, please wear
- safe shoes (no flip-flops, open-toed shoes, or high heels)
- safe clothing (no shorts, tank tops, or midriff-baring tops)

Day 2 (Monday, July 27)

Time	Session	Location
7:45	Meet in Dearborn Inn Lobby (Shuttle transportation to event)	
8:00 – 8:30	BREAKFAST	Main room
8:30 – 8:50	Morning Check-In: Questions, Ideas, Stories	Main room
8:50 – 10:40	Hands-On Session: Using Literacy Strategies to Support Science Learning *Energy from the Sun: Biomass*, **Activity 1: Biomass and the Developing World**	Main room
10:40 – 10:55	BREAK	Main room
10:55 – 12:00	Hands-On Session: Moving Toward Inquiry-Based Learning *Is Hydrogen a Solution?* **Activity 2: Fuel from Water** **Activity 3: It's a Gas!**	Main room
12:00 – 12:50	LUNCH and travel to science lab	Main room
12:50 – 2:45	Hands-On Session: Moving Toward Inquiry-Based Learning (continued)	Science lab
2:45 – 3:00	BREAK	
3:00 – 4:15	Making Real-World Connections with Coordinated Learning Experiences, Part I *Is Hydrogen a Solution?*	Science lab
4:15 – 4:30	Wrap-Up: End of Day Reflections and Homework Assignments	Science lab
4:30	Shuttle transportation to hotel	

Homework

Complete sections I and II of the Implementation Planning Template.

For session on Technology Integration:

- Read "Anywhere Learning" by J. Angelo, K. Conners, &T. Helkowski.

For session on Performance-Based Assessment:

- Read "Introduction to Project-Based Learning" from the Buck Institute.
- Read "Healthier Testing Made Easy: The Idea of Authentic Assessment" by Grant Wiggins.

Day 3 (Tuesday, July 28)

Time	Session	Location
7:45	Meet in Dearborn Inn Lobby (Shuttle transportation to event)	
8:00 – 8:30	BREAKFAST	Main room
8:30 – 8:50	Morning Check-in: Questions, Ideas, Stories	Main room
8:50 – 10:30	Hands-On Session: Technology Integration *Energy from the Sun: Biomass*, **Activity 2: This Sure Doesn't Look Like an Electric Stove**	Computer lab
10:30 – 10:45	Web site tour	Computer lab
10:45 – 11:00	Break	Main room
11:00 – 12:00	Planning time	Main room
12:00 – 12:45	LUNCH	Main room
12:45 – 2:15	Hands-on Session: Performance-Based Assessment *The Nuclear Revolution,* **Activity 1: The Power of the Nucleus**	Teaching lab
2:15 – 2:30	BREAK	Main room
2:30 – 3:55	Hands-on Session: Performance-Based Assessment (continued)	Teaching lab
3:55 – 4:15	Wrap-Up: End of Day Reflections and Homework Assignments	Teaching lab
4:15	Shuttle transportation to hotel	

Homework

For session on Planning to Implement Ford PAS:

- Complete the Implementation Planning Template
- Read "Pocket Guide to Probing Questions" from the National School Reform Faculty

Optional:

- Read *Teaching for Meaningful Learning: A Review of Research on Inquiry-Based and Cooperative Learning* by Brigid Barron and Linda Darling-Hammond

Day 4 (Wednesday, July 29)		
Time	**Session**	
7:45	Meet in Dearborn Inn Lobby (Shuttle transportation to event)	
8:00 – 8:30	BREAKFAST	Main room
8:30 – 8:50	Morning Check-in: Questions, Ideas, Stories	Main room
8:50 – 10:00	Making Real-World Connections with Coordinated Learning Experiences, Part II	Main room
10:00 – 10:15	BREAK	Main room
10:15 – 11:45	Implementation Plans	Main room
11:45 – 12:00	Wrap Up and Evaluation	Main room
12:00	Shuttle transportation to airport or hotel	
1:00 – 5:00	Optional: Visit to Greenfield Village	