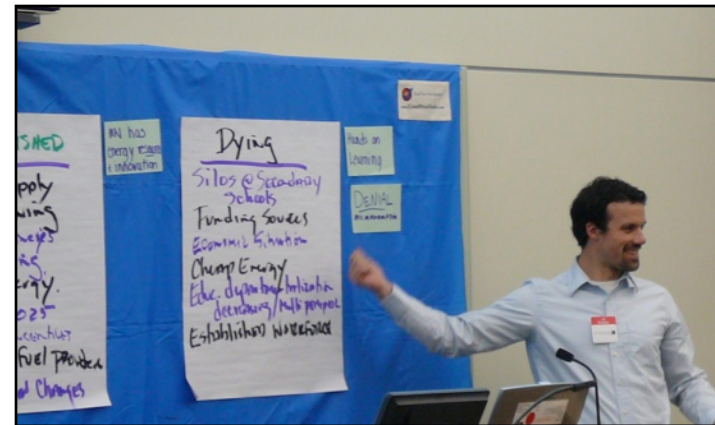


Energy Education Task Force

December 22, 2010



<i>What are the Drivers & Trends making us think about a statewide Energy Education Strategy?</i>		
Emerging	Established	Dying
<ul style="list-style-type: none"> •Peak Oil •MN Leader in Renewable Energy •Workforce Crisis •Global Competition •Schools Actively Involved 	<ul style="list-style-type: none"> •Opportunities to Apply Learning •Many Agencies Working Together •Increase in Cost of Energy •25% by 2025 and Conservation Incentives •MN Not a Fossil Fuel Provider •Increase in Technological Changes 	<ul style="list-style-type: none"> •Silos in Secondary Schools •Funding Sources •Economic Situation •Cheap Energy •Educations Departmentalization •Established Workforce
<ul style="list-style-type: none"> •“Green” is Becoming Mainstream •Attitude of Wastefulness •Changing, New Technology •Opportunity to “Go Viral” •Out Migration of Rural Youth, Talent •Awareness of Energy Job (K-16) •Positive Attitude Shift in Younger Generation •Interest in STEM Education •Limited Resources •STEM •Online Education •Interconnectedness, Electronic Networking & Collaboration •Young People’s Expectations •Innovation, Innovative Solutions •Fab Labs 	<ul style="list-style-type: none"> •MN has Energy Resources and Innovation •Security = Energy •Middle Class Decreasing •Information Society •Age of Workforce 50+ •Economic Development Initiative Funds •Other Consortiums •STEM Consortiums 	<ul style="list-style-type: none"> •Silos in State Agencies •Classroom Teachers •Hands on Learning •Denial, Misinformation •Ownership of Single Organization vs Collaboration •Attitude that Energy is Someone Else’s Responsibility •Silos •Careers w/o Education

Visioning: What Are the Key Elements of a Comprehensive, Statewide Energy Education Strategy?

Clear Vision	Inventory of Current Strategies & Practices	Stakeholder Partnerships	Marketing & Communication	Collaborative Structure & Work Plans	Implementation Methods
<i>Our ideas...</i>					
<ul style="list-style-type: none"> •Use Greenprint Audiences: Work, Home, School, Play •Define Goal: What’s the Problem? •What is the End? Success? •Audience? Needs? Vision! •What is Education? •Asset Based Approach •“Target Audiences” Best ROI 	<ul style="list-style-type: none"> •Emulate KEEP, Extend to K-16 and Beyond •Education Resources (Existing & Creating) •Full Inventory of Assets •What is In Place Now? Need Assessment •Expand Successful Efforts •Don’t Reinvent the Wheel •Use Existing Models, Best Practices 	<ul style="list-style-type: none"> •Industry Buy-In, Participation •Build the Community of Practice Network •Industry and Gov’t Clout, Business •Legislative Mandate, \$ •Policy (Top Down) Balanced with Grassroots •MN Education Standards: Alignment or Adjustment? •Mandated or No Teacher Buy In •Explore 2020 Energy Sustainability Framework 	<ul style="list-style-type: none"> •Good Marketing, Public Relations •Marketing “Buzz” 	<ul style="list-style-type: none"> •Commitment to Idea of Consortium •Establish Leadership for this Project •Identify Participants •Seek Funding Collaboratively •Share Ideas, Focus Energies •Establishing Timelines 	<ul style="list-style-type: none"> •Clear Standards, Learning Outcomes •Train the Teachers •Hands On Experimentation •Applied Education, Service Learning •Learner Audience •Cross Discipline Integration •Results Driven Process •Assessment Concepts? Behavior Change? •Delivery, Product

Some of the Obstacles We See Ahead...

- 25% by 2025 is too low a goal.
- Funding
- Recognize the cost of what we do today vs cost of doing it right.
- Fitting into No Child Left Behind
- Topic scares a lot of teachers
- Demand will change education over next 20 yrs.
- Topic vocabulary is difficult
- Perceived shortage of resources

Guiding Team:

- Positions the process of developing a consortium for success
- Guides process, not content of the plan
- Develops and proposes a consortium development process to Planning Team
- Finds resources to advance process
- Meets as necessary; seeks input from Planning Team on process
- Plans its own demise as consortium structure arises

Rich, Tracy, TBD

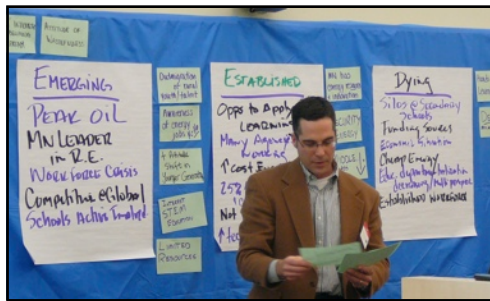
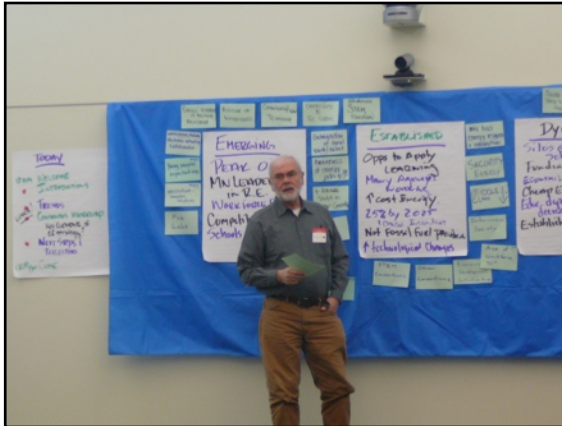
Planning Team:

- Meet again in February/March (?)
- Develops a plan to implement the vision
- Potential members of consortium
- Review consortium development process, recommendations from Guiding Team

**Trust is the
Currency of
Collaboration**

Emerging Timeline

1. Prework	2. Today	3. Strategy Development	4. Implementation & Capacity Building
<p>Stakeholder engagement and data collection.</p> <p>Invite as Task Force to consider a comprehensive, statewide energy education strategy.</p>	<p>Articulate a vision for a comprehensive, statewide energy education strategy.</p> <p>Launch formal development of a consortium, chartering a Guiding Team and a Planning Team.</p>	<p>Review obstacles to a statewide energy education strategy.</p> <p>Develop implementation strategies and work groups.</p> <p>Review consortium development process and recommendations from Guiding Team.</p> <p>Milestones</p>	<p>Develop work group plans, begin implementation</p> <p>Develop consortium capacity for implementation.</p>
<i>Done!</i>	<i>Done!</i>	<i>February- March 2011</i>	<i>March+ 2011</i>





facilitated by: Jonathan Bucki



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