

Making Science And Engineering Fun

Urban Conference Presentation
Deb Ivey, 4-H PLTW Coordinator

Session Agenda

- How did WI 4-H get involved in Project Lead the Way?
- What is a 4-H Gateway Academy?
- What is Project Lead the Way?
- Hands-On Activities

4-H Gateway Academy

- Kern Family Foundation Grant
 - To UW Extension 4-H Youth Development
 - Increase rural schools that offer PLTW
 - Offer Summer MS Engineering Programs
 - Tied to 4-H SET Mission Mandate

4-H Gateway Academy

- 4-H PLTW Coordinator
- Opportunity to jump start 4-H SET in Wisconsin
- Project Lead the Way Schools
- Society of Manufacturing Engineers Education Foundation

4-H Gateway Academy

- Summer day camp for middle school youth
- Specialized curriculum
- PLTW teachers; 4-H Staff support



WI 4-H Gateway Academy

- 9 schools in 2008
 - Racine, Eau Claire, Appleton, LaCrosse, Madison East, Plymouth, Platteville, Eagle River, Prairie du Chien
- 22 schools in 2009
 - Milwaukee (2), Kenosha, Clinton, New Glarus, Superior, Prentice, Burlington, Manawa, Spring Green, New Richmond, Madison Memorial, Watertown

4-H Gateway Academy

- Curriculum—Three Parts
 - Team building activities
 - Get-acquainted, etc.
 - ½ to 1 hour
 - Projects
 - Simpler SET activities
 - 1-2 hours
 - Problems
 - In depth Engineering activity
 - 1 ½ to 2 days



Project Lead the Way



- Non-profit organization focused on preparing the future technical and engineering workforce in America
- Offer professional development, curriculum and school support
- Funding available



Project Lead the Way

- www.pltw.org; 2500 schools in 49 states
- Kern Family Foundation
- www.kffdn.org
 - Funding to Wisconsin, Illinois, Iowa and Minnesota
 - <http://www.pltw-wi.org/>
 - <http://www.pltw.illinois.edu/>
 - <http://www.pltwiowa.org/>
 - <http://www.mnpltw.org/>



Project Lead the Way

- Middle school curriculum (Gateway to Technology)
- High school curriculum (Intro. to Engineering Design, Principles of Engineering, Computer Integrated Manufacturing, Civil Engineering and Architecture, Aerospace, Biotechnical, Electronics)

A 4-H Gateway Academy in your State/Community

- PLTW trained teachers and schools
- Society of Manufacturing Engineers Education Foundation
- Funding
- 4-H Staff Support



Gateway Academy Hands-on

- Activities
 - Line-Up
- Projects
 - Bridge Span
 - Golf Ball Exercise
- Problems
 - Create a Perfect.....

For more information

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