WATER EDUCATION IN KANSAS

Presentation to Missouri RAC
Laura Downey, Executive Director
A Little KACEE Background

• Founded in 1969
• Public/Private Partnership with more than 500 individual and organizational members
• Accelerating environmental literacy through non-biased and science based environmental education
• Affiliate of the North American Association for Environmental Education
What is Environmental Education?

Environmental education may best be defined as a process directed at creating awareness and understanding about environmental issues that leads to responsible individual and group actions.

- Focuses on processes that promote critical thinking, problem solving, and effective decision-making skills
- **Good environmental education teaches kids HOW to think and not WHAT to think.**
What We Do:

• Professional Development
• Networking Events
• Leadership Development
• Recognition Programs
• Resources and Direct Support
• Kansas Green Schools Network
WATER EDUCATION IN KANSAS

KACEE Water Education Programs
Professional Development for Educators

• Project WET
• Discover a Watershed
• Conserve Water
• Getting Little Feet WET
• Healthy Water, Healthy People

Workshops—Across the state and on demand
Developing Online Professional Development
What is Project WET?

- KACEE administers Project WET in Kansas through carefully designed water education professional development opportunities that connect educators with high quality educational tools, as well as local water information and resources.
- Correlated to State Core Curricular Standards.
- 100’s of Activities aimed at PreK-12 students teaching about every aspect of water from history and importance of water to understanding a watershed to water conservation and more.
- Currently a small amount of funding through KDHE.
Sample Activity

Macroinvertebrate Mayhem

How does the phrase “appearances can be deceiving” apply to the water quality of a sparkling, crystal-blue stream?

- Grade Level
  Upper Elementary, Middle School

- Subject Areas
  Ecology, Environmental Science, Mathematics

- Duration
  Preparation time: Part I: 20 minutes; Part II: 50 minutes
  Activity time: Part I: 50 minutes; Part II: 50 minutes

- Summary
  Students play a game of tag to simulate the effects of environmental stressors on macroinvertebrate populations.

- Objectives
  cards may be laminated and categories can be color-coded for ease. Use clothes-pins or paper clips to attach labels to students’ clothing.
  - Pillowcases or burlap bags
  - Chart paper or a chalkboard

NOTE: To adapt this activity for your area, contact the state Department of Land and Natural Resources or Fish and Wildlife Service for information.
Water Education Action

- Classrooms
- Water Festivals
- Day on the Farm
- Camp/Scouts
- Outreach
LEADING WITH KANSAS GREEN SCHOOLS
Kansas Green School Program

The Kansas Green Schools Network is a network of 450 schools and 19 school districts from around the state.

Map at www.kansasgreenschools.org/
What is a Green School?

- Establish a Green Team
- Engage students, teachers, administration, staff and community in investigating the environmental footprint of the school in five areas
- Collect data, analyze, make a plan and implement
- Share the plan and Celebrate
- Get Recognized
Water Investigation
Green Schools in Action

Water

• Wyandotte High School
• Started with gardens
• Focus on Water, investigation of the local watershed, water testing, water use at school
• Grants to support community water study
• Lead teacher honored as Presidential Innovation Awardee for Environmental Education
DELIBERATIVE DIALOGUE

Environmental Issues Forums
Engaging Adults in Environmental Education

Developed by the North American Association for Environmental Education in collaboration with the Kettering Foundation

<table>
<thead>
<tr>
<th>Debate</th>
<th>Discussion</th>
<th>Deliberative Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winners and losers</td>
<td>Back &amp; forth exchange of information, stories, experiences, viewpoints</td>
<td>Goal is shared understanding of the issue/problem</td>
</tr>
<tr>
<td>Search for glaring differences</td>
<td>May focus on a topic, theme, idea, problems, issues, etc., may be broad or focused</td>
<td>Examining costs &amp; consequences of even most favored approaches</td>
</tr>
<tr>
<td>Search for weaknesses in others’ positions</td>
<td>A generic term meaning talking together</td>
<td>Assumes that many people have pieces of an answer &amp; a workable solution</td>
</tr>
<tr>
<td>Counter another’s position at the expense of the relationship; defend assumptions as truth</td>
<td>Focuses on the experience of talking without any particular goal or desired outcomes</td>
<td>Listening to understand &amp; find meaning</td>
</tr>
<tr>
<td>Invest wholeheartedly in your beliefs</td>
<td>May be between two people or among many</td>
<td>Presents assumptions for re-evaluation</td>
</tr>
<tr>
<td>Listen to find flaws &amp; counterarguments</td>
<td>May mean many kinds of talking together (such as informative discussion, persuasion, argument, etc)</td>
<td>Offers possibilities for new solutions</td>
</tr>
<tr>
<td>Is oppositional &amp; seeks to prove the other wrong</td>
<td>Usually implies participants are not adversarial or competing as in a debate</td>
<td>Leads to mutual understanding of differences &amp; ways to act even with those differences</td>
</tr>
<tr>
<td>The goal is winning</td>
<td></td>
<td>People explore what’s important to them &amp; others by asking questions</td>
</tr>
<tr>
<td>Most useful when: A position or course of action is being advocated &amp; winning is the goal</td>
<td>Most useful when: People want to talk without desiring any particular outcomes</td>
<td>Most useful when: A decision or criteria for a decision, about the best way(s) to approach the issue or problem is needed</td>
</tr>
</tbody>
</table>
Water Issues

- Reservoirs
- Urban Stormwater Runoff
- Groundwater
- Water Availability
- Can be customized
HISTORY OF KWO/KWA SUPPORT

FY2008-FY2012
Past Support of KWO/KWA for Project WET

*Categorizing of educators attending trainings was not completed until FY2009

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Formal Educators</th>
<th>Non-Formal Educators</th>
<th>Preservice Teachers</th>
<th>Total Educators Trained</th>
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<tbody>
<tr>
<td>2008*</td>
<td></td>
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<td>298</td>
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<tr>
<td>2009</td>
<td>213</td>
<td>44</td>
<td>124</td>
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<td>2011</td>
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<td>195</td>
<td>161</td>
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<tr>
<td>2012</td>
<td>154</td>
<td>32</td>
<td>101</td>
<td>287</td>
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<td>TOTALS</td>
<td></td>
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<td>1819</td>
</tr>
</tbody>
</table>

Based on estimates of students reached by educators, well over 100,000 students are reached annually!

KWO/KWA support was between $40,000-$50,000 annually during this time period.
Questions?

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