Introductions

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Presenter  Presenter  Moderator  Host & Technical Coordinator
**Objectives**

1. Increase your understanding of logic models and how to use them for project planning and evaluation.
2. Engage you in thinking about how to demonstrate success in your project.
3. Orient you to the use of performance standards for a systematic evaluation process.
4. Inspire you to join us in our efforts to develop an ATE evaluation community of practice.

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**Logic Models**

- Visual, one-page, depiction of program
- Roadmap to impacts
- Testable
- Communication tool
The GET Institute provides training for local college faculty and supports them in implementing a green energy technology module in their classrooms. This project addresses regional workforce needs for green energy technology-related skills. Through the GET Institute, faculty are (1) trained in how to use basic green energy applications and receive support in designing and delivering instructional modules and (2) learn about green energy technology jobs in the region through guest lectures and industry field trips.

Several hundred students are using the green energy technology modules in classes taught by the faculty and are becoming aware of green energy career opportunities. Green energy technology occupational information and learning experiences are also being included in a variety of campus-wide student activities, thus impacting the entire college.

The GET Institute also contributes to ongoing national efforts to develop models for incorporating green energy technology into existing community college curricula. In coordination with the ATE Green Center, this project is disseminating its findings to the broader academic community working to address the challenge of increasing knowledge of and interest in green energy technology occupations.
Success Indicators

Observable, measurable information that tells us about the status or quality of something

Success Indicators

- Operationalize logic model elements
- Identify signals of performance
- Guide data collection for evaluation
Example ATE Logic Model

Activity Success Indicators

Faculty workshops

How can we measure our performance on this activity?
Activity Success Indicators

- Awareness of green energy technology
- Green energy technology knowledge increase
- Satisfaction with workshop
- Likelihood of use
- Number and percent complete
- Cost per participant
# Activity Success Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measure</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Energy Technology awareness</td>
<td>Survey</td>
<td>Participant self-report</td>
</tr>
<tr>
<td>Number and percent complete</td>
<td>Attendance &amp; Invitation counts</td>
<td>Project records</td>
</tr>
</tbody>
</table>

## Indicator Protocol Reference Sheet

<table>
<thead>
<tr>
<th>Name of Indicator:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Precise definition(s):</td>
</tr>
<tr>
<td>Unit of measure:</td>
</tr>
<tr>
<td>Disaggregated by:</td>
</tr>
</tbody>
</table>

### Plan for Data Acquisition

<table>
<thead>
<tr>
<th>Data collection method and timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original data source:</td>
</tr>
<tr>
<td>Estimated cost of data acquisition:</td>
</tr>
</tbody>
</table>

### Plan for Data Analysis, Review, and Reporting

<table>
<thead>
<tr>
<th>Data analysis and reporting:</th>
</tr>
</thead>
</table>

### Data Quality Issues

<table>
<thead>
<tr>
<th>Known data limitations and significance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions taken or planned to address data limitations:</td>
</tr>
</tbody>
</table>

### Other Notes

<table>
<thead>
<tr>
<th>Notes on baselines/targets:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other notes:</td>
</tr>
</tbody>
</table>

This sheet last updated on:
Example ATE Logic Model

Inputs:
- NSF Funding
- Needs assessment
- Advisory panel
- ATE network
- Field trips
- Campus-wide activities
- Dissemination

Activities:
- Faculty workshops
- Follow-up support
- Guest lectures
- ATE workshops
- Campus-wide activities
- Dissemination

Outputs:
- Trained faculty
- Modules
- Model curriculum

Short-Term Outcomes:
- Increased student knowledge & skills in green tech
- Increased student interest in green tech careers
- Curricula disseminated

Mid-Term Outcomes:
- Graduates enter green tech careers
- Community colleges adopt curricula

Long-Term Outcomes:
- Regional demands for green technicians are met
- Increased regional economic vitality
- Enhanced national capacity for sustainable development

Outcome Success Indicators

Regional demands for green technicians are met

How can we measure our performance on this outcome?
Outcome Success Indicators

Regional demands for green technicians are met

- Employer opinions
- Media reports
- Number of placements with regional employers

Outcome Success Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measure</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer opinions</td>
<td>Interviews</td>
<td>HR managers</td>
</tr>
<tr>
<td>Number of job placements</td>
<td>Survey</td>
<td>Graduates</td>
</tr>
</tbody>
</table>
It’s Not Just About Goals...

Look Outside the Boxes...

- **Inputs**: NSF Funding, Needs assessment, Advisory panel, ATE network
- **Activities**: Faculty workshops, Follow-up support, Guest lectures, Field trips, Campus-wide activities, Dissemination
- **Outputs**: Trained faculty, Modules, Model curricula
- **Short-Term Outcomes**: Increased student knowledge & skills in green tech
- **Mid-Term Outcomes**: Graduates enter green tech careers
- **Long-Term Outcomes**: Increased regional economic vitality
  
  - Increased student interest in green tech careers
  - Regional demands for green technicians are met
  - Community colleges adopt curricula

- **Regional effects**: Increased student interest in green tech careers, Regional demands for green technicians are met, Community colleges adopt curricula

- **National effects**: Enhanced national capacity for sustainable development

- **Benefits**: Increased student knowledge & skills in green tech, Graduates enter green tech careers, Community colleges adopt curricula
Look Outside the Boxes...

• Unanticipated impacts
• Side effects
• Unintended beneficiaries

Performance Standards

• Definition of performance quality
• May be articulated as
  – minimum level of acceptable performance
  – ratings, e.g., poor to excellent
  – grades
Performance Standards

Standard for “Normal”

Systolic <120
&
Diastolic <80

Performance Standards Rubric

Activity: Faculty are trained

Success Indicator: Percentage of targeted faculty that completes training

Performance Standards Rubric

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
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<tbody>
<tr>
<td>75% or more</td>
<td>50%-74%</td>
<td>25%-49%</td>
<td>Less than 25%</td>
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</table>
### Why Use Standards?

**Aid in interpreting & reporting results**

*Fifteen science faculty at the college received training.*

*The project has done an admirable job of involving faculty.*

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**Establish common and realistic understanding of what constitutes “success”**

- They need to involve at least 95% of the faculty
- It’s most important that new faculty participate
- To deeply engage 5 instructors would be great
- They must reach out to faculty from other colleges

Evaluator  |  PI  |  Faculty member  |  Program officer
Why Use Standards?

Track & compare progress across time and project components

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>Excellent</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Poor</td>
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- Faculty Training
- Module Development
- Curriculum Dissemination

Sources for Standards

- National measures
- Research literature
- Staff experience, expertise, expectations
- Advisory board
- Funder
- Other grantees
Standards: Annual ATE Survey

Survey results available from: evalu-ate.org/reports

Overall Enrollment by Gender

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
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<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
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Changing Standards

- Verify with all involved
- Revisit after:
  - ATE annual survey findings are published
  - Each evaluation cycle
  - Major milestones
Visit resources.evalu-ate.org
Keyword search: evaluation tools

ATE Evaluation Community of Practice
community.evalu-ate.org
Upcoming Events

Evalua|t|e Workshop: February 4 & 5
Professional Development Impact Evaluation
Rio Salado Community College, Tempe, AZ
Joellen Killion, Presenter

MATEC Webinar: February 12
Evaluating Student Impact

Evalua|t|e Webinar: March 17
Evaluation Data

Register at www.evalu-ate.org/events

Thank You!