The Values-Engaged Educative (VEE) Evaluation Approach

Ayesha Boyce, University of North Carolina at Greensboro
Lizanne DeStefano, Georgia Institute of Technology
Jennifer Greene, University of Illinois Urbana-Champaign
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Strengthening the quality of the MSP project evaluation and building the capacity of the evaluators by strengthening their skills related to evaluation design, methodology, analysis, and reporting.
Website at [http://teams.mspnet.org](http://teams.mspnet.org)
- Online Help-Desk for submitting requests
- Assistance with instruments
- Consultation and targeted TA
- Webinar series on specific evaluation topics
- White papers/focused topic papers
The Values-Engaged Educative (VEE) evaluation approach

**Presenters:**
- **Ayesha Boyce**, Assistant Professor, University of North Carolina at Greensboro
- **Lizanne DeStefano**, Professor & Director of CEISMC, Georgia Institute of Technology
- **Jennifer Greene**, Professor, University of Illinois Urbana-Champaign

**Moderator:**
- **John Sutton**, RMC Research Corporation, TEAMS Project PI
Goal:

Attendees will be introduced to the Values-Engaged, Educative (VEE) evaluation approach and have resources to pursue further learning.
Webinar Sections

Attending to Equity and Diversity

VEE Background and Theory

VEE Implementation

VEE Examples

Resources
Attending to Equity and Diversity

STEM, Diversity, and Education

• Historical Inequities & Lack of diversity

• U.S. Global Competitiveness
  • National defense, climate, health, energy, economic growth, food safety and access, environment

• National Science Foundation (NSF) and others
  • Broadening Participation (BP) in STEM

• Benefits of diversity
STEM, Diversity, and Education

Source: NCES Digest of Education Statistics; Science and Engineering Indicators 2008
STEM Program Evaluation

• AEA Statement on Cultural Competence
• Attention to diversity and culture
  • Mertens & Hopson, 2006
• More trained STEM evaluators and instruments necessary
  • Katzenmeyer & Lawrenz, 2006
VEE Background and Theory

• Continuing evolution of evaluation theory: 5 main genres
  • Policy-oriented
  • Accountability-oriented
  • Educative, learning-oriented, practically useful
  • Responsive, culturally responsive
  • Democratic, participatory

• Values are recognized as part of evaluation
  • Not formalized outside of participatory, democratic traditions

• Our motivation
  • Practical, useful, and defensible enactment the role of values in evaluation
  • To concentrate on evaluation of STEM education programs; context of BP
VEE Background and Theory

NSF Funding


Field Tested on Multiple STEM Education Projects, K-20, formal and informal science

• Summer Camps, Nanotech Center Outreach, Math curricula
• NSF: 2 MSPs, 8 REUs, 2 RETs, 1 CCI, 2 STCs, 3 IGERTs
Values-Engaged, Educative Evaluation Approach

“A Values-Engaged, Educative Approach for Evaluating Education Programs

A Guidebook for Practice

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Jennifer C. Greene, Ayubuko Boyeye, Iloate Ona
University of Illinois at Urbana-Champaign

“Values engagement’ has two main dimensions. First, it signals purposeful attention to the values that are intrinsic in education programs... and second it pays special attention to the values of diversity and equity.”
Values in Evaluation

Values-Engaged, Educative Evaluation Approach

• Values and valuing are intrinsic to evaluation
  • Judgments based on “criteria of quality”
  • Where do such criteria come from?

• Two sets of values in evaluation
  • Descriptive values – part of program design and context
  • Prescriptive values – those intentionally advanced by the evaluator
Values-Engaged, Educative Evaluation Approach

Prescriptive valuing is contested

• **NO!**
  - The evaluator should keep his or her values out of the evaluation.
  - Values promotion is not our job or responsibility or prerogative.

• **YES!**
  - All evaluations advance some values; evaluators are partly responsible for which values get advanced.
  - It is more democratic to include the values (priorities, perspectives) of multiple stakeholders.
  - Evaluation should work for democratization, not for maintenance of the status quo.
Values-Engaged, Educative Evaluation Approach

Key values promoted in VEE

- **Inclusion** – of all stakeholder interests, concerns, values
- **Equity** – how well the program being evaluated affords access, meaningful participation, and accomplishment for all relevant stakeholders
- **Diversity** – multidimensional, contextual, positioned in service of equity
Evaluation's Educative Traditions

Values-Engaged, Educative Evaluation Approach

A Values-Engaged, Educative Approach for Evaluating Education Programs

A Guidebook for Practice

"Ongoing attention to the evolving program description is a vital part of values-engaged, educative evaluation. Providing opportunities for stakeholders to think critically about their own program and speak with others about alternative program designs is the core ambition of this approach’s educative aspirations."
Values-Engaged, **Educative** Evaluation Approach

Pearls of wisdom from Lee J. Cronbach

- The evaluator is an educator; judged by what others learn
- Program evaluation is a process by which society learns about itself.
- Program evaluation should contribute to enlightened discussion of alternative plans for social action.

- Primary ambition – opportunities for stakeholders to think critically and reflectively about the design and implementation of their own program – its logic and fit to context

- Also – how well the program performs in the contexts in which it is being implemented – how well it fits the cultures, routines, norms, and values of these contexts. (Saville Kushner)
Values-Engaged, **Educative** Evaluation Approach

- Enacting these educative ambitions
  - Carefully attend to the *context* in which the program is being implemented.
  - Use the concept of *program theory*
Questions?
Webinar Objectives

- Attending to Equity and Diversity
- VEE Background and Theory
- VEE Implementation
- VEE Examples
- Resources

Major characteristics of VEE implementation … our aspirations

- Onsite presence
- Inclusion of multiple, diverse stakeholder experiences and viewpoints
- Critical reflection
- Disaggregation, by important characteristics of context and participants
- Dialogue, ongoing reporting and conversation
Critical commonplaces for VEE implementation specification of:

- Evaluator Role
- Evaluation purpose and audience
- Key evaluation questions
- Criteria for judging program quality
- Communication and reporting practices
Evaluator Role

- Authority and credibility
- Understand context
  - build rapport and “show up”
- Be explicit about value commitments
  - engage values of program and stakeholders
- Provide spaces for dialogue
- Frequent and open communication
Evaluation purpose and audience

- Formative and Summative
- Attention to diversity, equity, pedagogy, and content

- Evaluation commissioners
- Program leaders
- Champions
- Staff
- Program participants
- Others as possible
Criteria for judging Quality

Diversity & Equity

Science Content

Program Quality

Pedagogy

Greene, DeStefano, Burgon, & Hall, 2006; Greene, Boyce, & Ahn, 2010
Key evaluation questions are about:

• The quality of contextual power of the program design
• The quality of the program content and pedagogy
• The quality of diverse participant experiences in the program
• The quality and magnitude of program outcomes and accomplishments
• Equity in program access, experiences, and accomplishments.
Communication and reporting

• Strong and effective communication and reporting relies on careful attention to and nurturing of the relational fabric of the evaluation.
• Ongoing, dialogic, inclusive, safe
• Just-in-time
• Formal and informal
• Multiple formats
Questions?
Evaluator Role

- Evaluator has a position of:
  - Authority
  - Credibility
- Teach stakeholders:
  - program logic and theory
  - evaluation
- Visible, on-site presence
- Reflection
Purpose and Audience

- Formative and Summative
  - Quality of Experience
  - Short and long-term outcomes
  - Increasing knowledge of factors that support teachers

- Engage with issues of content, pedagogy, diversity and equity

- Audience All possible stakeholders
  - Funders, Program Managers/PIs, Participants, Policy Makers and Public
Key Evaluation Questions

- **Implementation:** Is the MSP program being implemented on schedule and as planned?
- **Effectiveness:** Is the MSP program operating effectively? How might they be improved?
- **Impact:** What outcomes are associated with participation in the MSP program?
- **Diversity/Equity:** How and in what ways does the MSP program provide equitable opportunities for a diverse group of teachers?
- **Sustainability:** How and to what extent are elements of the MSP becoming institutionalized. What opportunities and barriers exist?
Evaluation Design/ Mixed Methods

- Observations
  - Class room practices
  - Teacher interaction with faculty/program providers
- Demographics
- Attrition
- Focus Groups & Surveys
  - Teacher & instructor satisfaction
VEE Examples

Evaluation Design/ Mixed Methods (cont.)

- Student Assessment
  - Achievement in math and science
- Teacher Assessment
  - Teacher content knowledge
- Document Analysis
  - MSP provider materials
  - Teacher lesson plans
- Comparison Group Data
Data Analysis & Evaluation Reporting

• Disaggregation
  • context and participants

• Ongoing Reporting
  • Formal and informal
  • Comprehensive evaluation report
  • Brief Evaluation Memo (exec summary)
  • Just-in-time conversations
  • Website posts
Questions?
Webinar Objectives

- Attending to Equity and Diversity
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Resources


• Articles
Questions?
## Purpose of the Evaluation

- The project description clearly states the project goals and objectives.
- The description provides a rationale for the project by clearly identifying the issue(s) or problem(s) the project designed to address.
- The description provides a concise theory of action that describes how the project will address the issue(s) or problem(s). This theory of action may also be stated in terms of a testable hypothesis.

## Evaluation Design & Measurement

- The project intervention is clearly described in terms of activities, events, professional development, scope, type, purpose, etc.

## Analysis

- The project's proximal target population(s) (those directly subject to the intervention) are clearly defined in terms of role, grade level, subject, etc.
- The project's distal target population(s) (those who indirectly benefit from the intervention) are clearly defined in terms of role, grade level, subject, etc.

## Generalizability, Representativeness, Utility

- The logic model clearly shows why project activities are expected to lead to the intended outcomes and impacts.

http://teams.mspnet.org/index.cfm/27152
Questions?

Ayesha Boyce  
ayesha.boyce@uncg.edu  
University of North Carolina at Greensboro

Lizanne DeStefano  
lizanne.destefano@ceismc.gatech.edu  
Georgia Institute of Technology

Jennifer Greene  
jcgreene@illinois.edu  
University of Illinois Urbana-Champaign

John T. Sutton, PI  
sutton@rmcdenver.com  
RMC Research Corporation  
633 17th St., Suite 2100  
Denver, CO 80202-1620  
Phone: 303-825-3636  
Toll Free: 800-922-3636  
Fax: 303-825-1626

Dave Weaver, Co-PI  
dweaver@rmccorp.com  
RMC Research Corporation  
111 SW Columbia St., Suite 1030  
Portland, OR 97201-5883  
Phone: 503-223-8248  
Toll Free: 800-788-1887  
Fax: 503-223-8399
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