Exploring NCWIT’s Evaluation Tools

Finding Evaluation Resources

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Meet the Presenters

Dr. Lyn Swackhamer – Research Scientist and Aspirations Program Evaluator

Dr. Gretchen Achenbach – Research Scientist
Session Overview

Evaluation Tools

Find a variety of surveys, observation forms, self-evaluation worksheets, and more that you can use “as is” or adapt for your own evaluation purposes. There are instruments that can be used to help you evaluate K-12, workplace, and post-secondary interventions.

View Online

Release Date: May 14, 2016
Audience(s): K-12, Higher Education, Workforce
Short URL: www.ncwit.org/evaluation
Type(s): Toolkit

ncwit.org/evaluation
Session Objectives

Importance of evaluation

Which type of evaluation is right for individual projects

NCWIT resources – connecting the right resource to a project
Why Use Evaluation?

To improve a project
To find out if you are achieving your goals
To secure funding
To make a case
Evaluation
How can I improve my program?
Evaluation Questions

Program Improvement

• How well is the program being delivered?

• What strategies can we use to improve this program?
Evaluation Questions

Program Improvement

• How well is the program being delivered?

Ask questions to participants such as:
1. What was your favorite part of this program?
2. What was your least favorite part of this program?
3. Would you like to come back to this program next year? (Yes, No, Not sure)
• What strategies can we use to improve this program?

Ask questions to program leaders such as:
1. Do you have any suggestions for improvements to the program?
2. What challenges, if any, did you encounter in running the program?
Do my program processes need to be changed?
Evaluation Questions

Process Improvement

• Did your program meet its goals for recruitment of program participants?

• Was the program delivered according to plan?
Evaluation Questions

Process Improvement

• Did your program meet its goals for recruitment of program participants?

Compare projected and actual counts – create spreadsheet to collect the data and compare results.
Evaluation Questions

Process Improvement

• Was the program delivered according to plan?

Collect observational data; survey data; and/or interview data.
Did my program make an impact?
Evaluation Questions

Impact Information

• What changes in your program participants’ behaviors are attributable to your program?

• What are the short or long term results observed among (or reported by) participants?
Evaluation Questions

Impact Information

- What changes in your program participants’ behaviors are attributable to your program?

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As a result of this program, my level of confidence in my computing skills has increased.

[Blank space for selection]**
Impact Information

• What are the short or long term results observed among (or reported by) participants?

Collect data through observation, interviews, or survey items.
Brainstorm
Questions?
Find a variety of surveys, observation forms, self-evaluation worksheets, and more that you can use “as is” or adapt for your own evaluation purposes. There are instruments that can be used to help you evaluate K-12, workplace, and post-secondary interventions.

[View Online](http://www.ncwit.org/evaluation)
NCWIT Evaluation Tools: K-12

For K-12 students:

A computing activity:
   a workshop, classroom unit, after-school program, summer camp etc…

An outreach presentation or event

New software
NCWIT Evaluation Tools: K-12

For K-12 teachers:

A workshop or professional development activity
NCWIT Evaluation Tools: Workplace

For employees:

Job engagement and satisfaction

Supervisors’ use of inclusive management practices

Employee mentoring program
For managers:

- Use of fair recruiting and hiring practices
- Use of promising employee development practices
- Reduction of bias in performance reviews and promotions
- Use of inclusive team management practices
NCWIT Evaluation Tools: Post Secondary

For undergraduates:

Research Experiences for Undergraduates (REUs)

Pair programming experience

Path to a computing course/program/major
NCWIT Evaluation Tools: Post Secondary

For undergraduates:

- Experience of the computing major
- Overall satisfaction
- Meaningful assignments
- Faculty-Student interaction
- Classroom climate
- And many more…

See also Survey-In-A-Box
For event attendees:

International Women’s Day or other event

Regional Celebration of Women in Computing or other conference for students

Awards event
What are you evaluating? 
A Workplace Intervention

From whom are you getting data?
Choose one:
• Managers/Supervisors
• Employees

What do we have available?
Worksheets:
• Employee Development: Supervisor Checklist
• Employee Recruitment and Selection: Supervisor Checklist
• Team Management: Supervisor Self-Assessment
• Performance Review Bias Reduction: Supervisor Self-Assessment
• Performance Review: Reducing Unconscious Bias Checklist
• Tracking Job Candidate Demographics

Surveys:
• Employee Recruitment and Selection: Supervisor Pre-Post Survey
• Mentoring Program Evaluation Survey
• Employee Engagement Survey
• Supervisor Team Management: Employee Survey
A K-12 Example: Robotics Workshop
Participant Survey

Parent Survey

Observation Protocol

Process evaluation:
Was the goal of 30 participants met?
Did they attend 4 sessions/receive 16 hours of instruction?
Etc…
Grade 4-12 Computing Program Participant Survey

Pre

1. Please provide the name of your program:

2. Please enter your first name and last initial (for example, I would be Lyn S.) so we can match this survey with your end of program survey.

3. Do you have a computer at home that you can use?
   - Yes, most of the time
   - Yes, some of the time
   - No, I can't use it
   - No computer at home

4. Do you have a tablet at home that you can use?
   - Yes, most of the time
   - Yes, some of the time
   - No, I can't use it
   - No tablet at home

5. Do you have a cell phone of your own?
   - Yes, with a data plan
   - No, but I can usually use someone else's phone
   - Yes, but it does not have a data plan
   - No cell phone

6. Do you have an email account of your own?
   - Yes
   - No

7. If yes, how often do you check your email?
   - Daily
   - 4-6 times a week
   - 2-3 times a week
   - Never

Post

1. Please provide the name of your program:

2. Please enter your first name and last initial (for example, I would be Lyn S.) so we can match your answers with this survey.

3. What was your favorite part of this program?

4. What was your least favorite part of this program?

5. Have you participated in any computer, technology, robotics, or programming clubs at school?
   - Yes
   - No

Comments
Did you change what you wanted to change - i.e. meet your program objectives?

Statistical tests to compare pre- and post- data sets

More labor intensive

Identifier needed to match pre- and post-surveys

Survey fatigue

Ideally, several weeks or more between tests
Survey: Post-Measurement Only

Use if the intervention is short (e.g. a one-day workshop)

Less effort for you and participants

Participants may better understand your questions

Did you change what you wanted to change – i.e., meet program objectives?

Participants compare knowledge or feelings from before and after the intervention (Retrospective Pre-test)

But, potential for inaccurate recall
9. Please mark your level of agreement or disagreement with the following sentences.

<table>
<thead>
<tr>
<th>People like me can do well learning technology.</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>People like me can do well in technology jobs.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>People like me can create new technology inventions.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
“People like me can do well learning technology”
Prior to the workshop, only 25% of participants agreed or strongly agreed with this statement

After the workshop, 78% of participants agreed or strongly agreed with this statement.
“People like me can do well learning technology”

Pre workshop mean = 2.2
Post workshop mean = 3.4

(Paired t test)
Employee Engagement Survey
(Pre- and Post-survey, or one-time administration)

<table>
<thead>
<tr>
<th>A successful manager...</th>
<th>Strongly Disagree ...... Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know the outcomes for which I am accountable.</td>
<td>1 2 3 4 5 NA</td>
</tr>
<tr>
<td>2. My immediate manager really knows me.</td>
<td>1 2 3 4 5 NA</td>
</tr>
<tr>
<td>3. My talents and abilities are fully utilized.</td>
<td>1 2 3 4 5 NA</td>
</tr>
<tr>
<td>4. Successes are recognized by my immediate manager and coworkers.</td>
<td>1 2 3 4 5 NA</td>
</tr>
<tr>
<td>5. My immediate manager does a good job of coaching me to build on my strengths.</td>
<td>1 2 3 4 5 NA</td>
</tr>
</tbody>
</table>
7. Now that you have seen this roadshow, how did it change your interest in exploring computer science as a college major or job choice (if at all)? (Check your answer)

- No change — I was already interested
- No change — I am still not interested
- I am slightly more interested now
- I am very interested now
- I was interested, and now I am no longer interested
3. What was your favorite part of this program?

4. What was your least favorite part of this program?
Pretest Your Survey

I think that last question may have been wrongly translated...

HA HA HA!!

PRE-TEST YOUR SURVEY QUESTIONS
Questions?
Your Turn

Workplace Scenario

Post-Secondary Scenario

K-12 Scenario
Opportunity for Real-Time Feedback

Access a quick survey about this workshop

» Use web browser on mobile device (case sensitive):
  » bit.ly/summit2017wkshps

» Access survey link through Summit App
For More Information

American Evaluation Association
www.eval.org

About Modifying Surveys...

Proceed With Caution!

Classroom Climate/Pedagogy Form
Download this form as a Word doc at www.ncwit.org/STEM and customize it for your institution.

[Survey questions and options]

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