

national center for

women &

INFORMATION
TECHNOLOGY

Evaluating a Mentoring Program

GUIDE



National Center for Women & Information Technology
www.ncwit.org | 303.735.6671 | info@ncwit.org

Strategic
Partners:



Microsoft Bank of America

Investment
Partners:

AVAYA



MERCK

TABLE OF CONTENTS

STEP 1: IDENTIFY THE PRIMARY PURPOSE FOR THE EVALUATION	3
STEP 2: REVISIT PROGRAM GOALS AND METRICS	4
STEP 3: DETERMINE EVALUATION DATA COLLECTION METHODS — QUANTITATIVE OR QUALITATIVE?	6
EVALUATION PLANNING WORKSHEETS	7
Worksheet 1a: Identify the Primary Purpose for the Evaluation	7
Worksheet 1b: Collect Descriptive Data	8
Worksheet 2: Determine Appropriate Metrics and Evaluation Methods	9
Sample Survey Questions	10
REFERENCES	11

INTRODUCTION

Mentoring can have positive effects for mentees, mentors, and organizations. Mentees experience career advancement and increased confidence in the workplace. Mentors experience personal satisfaction, collegiality, networking, and career enhancement. Organizations see improved productivity, recruiting, employee socialization, and retention.

Evaluating your mentoring program can help you make necessary adjustments and, ultimately, determine its effectiveness. In this resource, we lay out a step-by-step plan for evaluating a mentoring program and provide some example worksheets to assist in the evaluation process. Although evaluation of workplace mentoring programs is still an evolving field, the following recommendations are based on the best and most current evaluation principles and practices.

STEP 1: IDENTIFY THE PRIMARY PURPOSE FOR THE EVALUATION (see Worksheet 1a on page 7)

Typically, evaluation is divided into two distinct types:

1. **Formative Evaluation:** Information that is collected during the course of the mentoring program and will be used to help improve the program.
2. **Summative Evaluation:** Evidence that is collected upon completion of the program in order to demonstrate whether or not the program has achieved its objectives.

The first task is to decide what kinds of information you are most interested in at this stage. If your program is in its early stages, you may wish to focus on formative evaluation information, which will help you revise the program before undertaking a summative evaluation. If the program has been in place for a while and is thought to be relatively stable, then it may be time for a summative evaluation. Typically, you will want to collect both kinds of information, but your emphasis on one or the other may vary based on the program's stage of development.

As you prepare for a summative evaluation, you will want to consider what kind of information would be most useful. For example, do you want to know what the mentees think of the program overall, what value they place on it, and how it has affected their perceptions of themselves in the workplace? Do you want to know what the mentors think of the program, its value, and their perceptions about their role in it? You may want to know what impact the mentoring program is having on the organization as a whole. For example, are there more women in leadership positions as a result of the program, fewer racial/ethnic minorities feeling isolated, etc.? You may want to gather information to answer all of these questions, so you will need to prioritize what is feasible based on what stage your program is in and what resources you can devote to evaluating it.

No matter which type of evaluation you focus on, you will first want to collect descriptive data about your program and participants. Descriptive data will help you better understand the evaluation findings.

Descriptive data could include (see Worksheet 1b on page 8):

Characteristics of mentors/mentees. For example:

- gender, race/ethnicity
- years of related work experience
- technical focus
- years in the organization
- previous experience with mentor relationships

Characteristics of mentor-mentee pair. For example:

- Is the mentor located in the same department as the mentee?
- How was the pair matched — voluntarily, by technical field, by age, at random, etc.?
- Are both members the same gender?
- Do both members have similar racial/ethnic backgrounds?
- Do both members have similar technical skills?
- Was there a friendship prior to this formal mentoring relationship?

STEP 2: REVISIT PROGRAM GOALS AND METRICS (see Worksheet 2 on page 9)

Program Goals. Appropriate metrics for your evaluation should be planned early on, to ensure that they are measured at the proper times and closely linked with your goals for the mentoring program. Program goals can usually be stated as the long-term purpose of the program. Program goals for a workplace mentoring program might be...

- to increase retention of recently hired staff
- to increase retention and job satisfaction of individuals from under-represented groups in the industry
- to facilitate the upward movement of women in an organization

Measurable Outcomes. To determine measurable outcomes appropriate for a given program, most professional evaluators keep the acronym “SMART” in mind. Program outcomes should have five characteristics:

1. **S**pecific (What exactly should the program achieve?)
2. **M**easurable (How will you know if you’ve met the objectives?)
3. **A**chievable (Are the objectives you set achievable?)
4. **R**ealistic (Are the objectives you set realistic, given the time and resources you have?)
5. **T**ime-bound (What is the timeline for achieving your objectives?)

Appropriate Metrics. Actual mentoring program outcomes will differ program to program, depending on what is of interest to the program managers, but certain categories of metrics tend to be included:

1. **Program Process Outcomes**
2. **Participant Experiences and Perceptions Outcomes**
3. **Organizational Effect Outcomes**

Descriptions and examples of each of these types of outcomes follow.

1. Outcomes for Program Process. Outcomes should include at least some measures of program quality. Common metrics associated with program quality are:

- Pattern of regular contact over the agreed-upon term of the mentoring relationship
- Degree of adherence to the formal mentoring program structure
- Level of satisfaction with various aspects of the mentoring program by both mentor and mentee (e.g., matching, monitoring, support, etc.)
- Level of commitment to mentoring program by both mentor and mentee

For example:

- At the end of the first year of mentoring, the mentor and mentee will have met once per month for 12 months.
- At the end of each quarter, 85% of mentors and 85% of mentees will report full cooperation with the program.
- At the end of the first year of mentoring, 85% of mentees will have completed a professional development plan.

2. Outcomes for Participant Experiences and Perceptions. Outcomes should include some measures of participant perceptions of changes resulting from the mentoring program. Common metrics associated with participant perceptions are:

- Perception of value of mentoring program by both mentor and mentee
- Perception of the appropriateness of the match by both parties
- Level of trust in the mentor relationship felt by both parties
- Feelings of interpersonal connectedness in workplace setting
- Comfort in the workplace setting
- Self-efficacy in the workplace setting
- Job satisfaction
- Technical skills
- Career opportunity
- Career satisfaction
- Career path over time
- Salary trend over time

For example:

- 85% of mentors will report feeling energized by their mentoring responsibilities.
- 85% of mentees will report feeling more satisfied in the workplace.
- 80% of mentees' supervisors will perceive mentees to be more engaged and productive than prior to their being mentored.

3. Outcomes for Organizational Effect. Ideally, outcomes should also include measures of longer-term outcomes and objective data. These data can be especially persuasive indicators of the program's value to the organization. Measures of organizational effect could include:

- Work performance of participants
- Length of participants' tenure in the organization
- Changes in the demographics of promoted employees
- Integration or recognition of the mentoring program in the organization
- Notable effects on organizational culture or employee expectations

For example:

- After three years of the mentoring program, mentees will have greater career advancement as evidenced by one or more promotions, compared to employees of the same rank and years of experience who are not part of the mentoring program.
- After five years of the mentoring program, mentees will have higher salaries compared to employees of the same rank and years of experience who are not part of the mentoring program.

STEP 3: DETERMINE EVALUATION DATA COLLECTION METHODS — QUANTITATIVE OR QUALITATIVE? (see Worksheet 2 on page 9)

Once the evaluation questions and metrics have been decided upon, then the evaluation methodology can be selected. You can ask yourself, “Are these metrics best supplied by quantitative data (survey results, objective data such as salary amounts, etc.) or qualitative data (from interviews and focus groups)?” Generally, a combination of anonymous surveys and in-person interviews conducted by a neutral party will provide the necessary data on perceptions and experiences. Objective data, such as salary trends, promotional paths, and other indicators of career advancement, may be useful as well.¹

Instruments for collecting data on the mentoring experience are available from a variety of sources. One we recommend is a journal article titled “Assessing Mentoring in Organizations: An Evaluation of Commercial Mentoring Instruments.”²

As a general rule, program improvement data (for formative evaluation) should be collected on at least a quarterly basis in the first year of operation. Thereafter, these data, together with medium- and long-term outcome data, can be collected less frequently, perhaps once or twice per year.

It is also a good idea to collect baseline data on all key metrics before the mentoring program is actually implemented. These data will illuminate any increases or decreases in important indicators over time.

With a clear methodology in mind, the next step is to invite all of those involved in the mentoring relationship to participate in the evaluation. To obtain an accurate picture of the program’s actual outcomes over time, it will be important to continue to collect data from those whose mentoring relationships are less successful or who drop out, as well as those whose relationships succeed.

¹ Kirchmeyer, 2005.

² Gilbreath, Rose, & Dietrich, 2008.

EVALUATION PLANNING WORKSHEETS

Worksheet 1a: Identify the Primary Purpose for the Evaluation

At a high level, decide to what extent you are interested in formative and/or summative feedback. (Please refer to page 3 for a description of formative and summative evaluation goals.)

Formative: What kinds of things do you want or need to know in order to help you refine and improve the program?

Summative: Has the program been implemented long enough to have reached some or all of its intended outcomes? If you are just at the beginning stages, collect baseline data. You can also decide on measurable outcomes now: What are the goals of the program? What do you want to see accomplished? Once sufficient time has passed for reaching some program goals, you can conduct summative evaluation.

Worksheet 1b: Collect Descriptive Data

List for yourself what descriptive data you plan to collect on your participants and mentor-mentee pairs. Select from the sample descriptive data categories below and/or add your own categories.

Sample Descriptive Data

Characteristics of mentors/mentees. For example:

- gender, race/ethnicity
- years of related work experience
- technical focus
- years in the organization
- previous experience with mentor relationships
- _____
- _____

Characteristics of mentor-mentee pair. For example:

- Is the mentor located in the same department as the mentee?
- How was the pair matched — voluntarily, by technical field, by age, at random, etc.?
- Are both members the same gender?
- Do both members have similar racial/ethnic backgrounds?
- Do both members have similar technical skills?
- Was there a friendship prior to this formal mentoring relationship?
- _____
- _____

Worksheet 2: Determine Appropriate Metrics and Evaluation Methods

Use the following steps to determine appropriate metrics and evaluation methods (sample entries included below):

1. List your goals for the program in the 1st column.
2. In the 2nd column, determine what outcome metrics you will use to measure these goals. Be sure to include different kinds of outcomes (program process, participant perception, and organizational effect — see page 4-5 for more info).
3. In the 3rd column, indicate whether these are long-term, medium-term, or short-term goals and outcomes.
4. In the 4th column, indicate how you will collect the data to measure this outcome (e.g., survey, interview, salary or promotion data, focus group — see page 6 for more info).

Goal	Outcome	Timeframe	Evaluation Method
<i>Effective Mentoring Program</i>	<i>Mentor/Mentee pair will meet once per month</i>	<i>Short-term and Long-term</i>	<i>Meeting log</i>
<i>Increase Job Satisfaction</i>	<i>85% of mentees will report...</i>	<i>Medium-term and Long-term</i>	<i>Survey</i>
<i>Increase Retention/ Advancement</i>	<i>% of female turnover will decrease compared to prior to program implementation</i>	<i>Long-term</i>	<i>Internal employee data</i>

Sample Survey Questions

These are just a sampling of the types of the questions you might want to include on your survey. Be careful about the question wording to avoid introducing bias in the responses.

After participating in this mentoring program, ...						
	Strongly Disagree Strongly Agree					
I am more satisfied with my job than before.	1	2	3	4	5	6
I feel more socially connected in the workplace than before.	1	2	3	4	5	6
I feel more comfortable in the workplace than before.	1	2	3	4	5	6
I feel more certain of my career path in this organization.	1	2	3	4	5	6
I feel more valued in this organization than before.	1	2	3	4	5	6
My technical skills have improved.	1	2	3	4	5	6

Please rate the ...				
value of this mentoring program for you.	Excellent	Good	Fair	Poor
value of this mentoring program for your mentoring partner, based on your perception.	Excellent	Good	Fair	Poor
overall quality of this mentoring program.	Excellent	Good	Fair	Poor
usefulness of this mentoring program.	Excellent	Good	Fair	Poor

REFERENCES

- Barker, L. & Cohoon, J.M. (2005). *How do you mentor technical women at work? Sun Engineering Enrichment and Development (SEED) Program (Case Study 1)*. Boulder, CO: NCWIT. See www.ncwit.org/seed.
- Barker, L. & Cohoon, J.M. (2005). *What makes electronic mentoring effective? MentorNet — www.MentorNet.net (Case Study 1)*. Boulder, CO: NCWIT. See www.ncwit.org/mentornet.
- Barker, L. & Cohoon, J.M. (2007). *Mentoring-in-a-box: Technical women at work*. Boulder, CO: NCWIT. See www.ncwit.org/imentor.
- Bozeman, B. & Feeney, M.K. (2007). Toward a useful theory of mentoring: A conceptual analysis and critique. *Administration & Society*, 39(6), 719-739.
- Davis, D.J. (2008). Mentorship and the socialization of underrepresented minorities into the professoriate: Examining varied influences. *Mentoring & Tutoring: Partnership in Learning*, 16(3), 278-293.
- DuBois, D.L., Holloway, B.E., Valentine, J.C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology*, 30(2), 157-197.
- Gardiner, M., Tiggemann, M., Kearns, H. & Marshall, K. (2007). Show me the money! An empirical analysis of mentoring outcomes for women in academia. *Higher Education Research & Development*, 26(4), 425–442.
- Gilbreath, B., Rose, G.L., & Dietrich, K.E. (2008). Assessing mentoring in organizations: An evaluation of commercial mentoring instruments. *Mentoring & Tutoring: Partnership in Learning*, 16(4), 379-393.
- Karcher, M.J., Kuperminc, G.P., Portwood, S.G., Sipe, C.L., & Taylor, A.S. (2006). Mentoring programs: A framework to inform program development, research, and evaluation. *Journal of Community Psychology*, 34(6), 709-725.
- Kirchmeyer, C. (2005). The effects of mentoring on academic careers over time: Testing performance and political perspectives. *Human Relations*, 58(5), 637–660.

This document focuses on evaluating mentoring programs. For more information on developing and implementing a mentoring program, see NCWIT's *Mentoring-in-a-Box: Technical Women at Work* available at www.ncwit.org/imentor and *Mentoring-in-a-Box: Women Faculty in Computing* at www.ncwit.org/facultymentor.



Mentoring-in-a-Box: Technical Women at Work zeroes-in on challenges unique to technical women in industry settings. It also focuses on the long view: helping women survive their jobs and thrive in their careers, as well as helping them envision, plan, and take practical steps toward positions of influence and innovation.



WWW.NCWIT.ORG/IMENTOR



Mentoring-in-a-Box: Women Faculty in Computing is designed to help pre-tenure faculty women prepare for the next stage of their careers, and to help them look ahead to positions of accomplishment and influence. It also addresses the challenges of the computer science faculty experience by providing practical activities, resources, and templates that a mentor and mentee can use right away.



WWW.NCWIT.ORG/FACULTYMENTOR