Possible Items for Cognota Question Bank

ROI INSTITUTE®

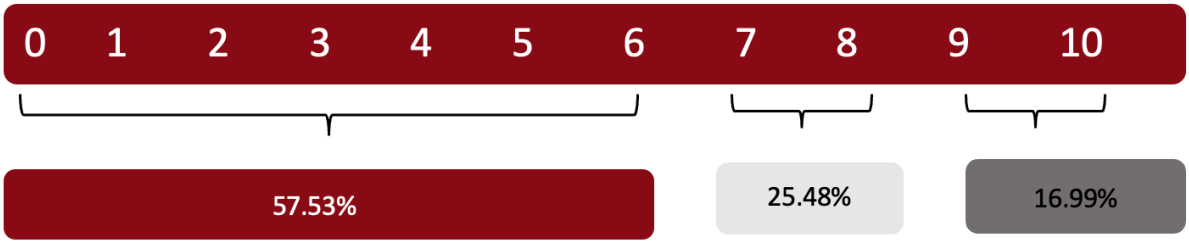
Level 1 Reaction

Classic Net Promoter[1]

On a scale from 0 to 10, how likely would you recommend the program to others in a similar position as yours?

Why did you score the way you scored?

Example



Why did you score the way you scored?

Reason	Weight
lack of vision	4
feeling of being undervalue	3
instability	3
culture/climate	3
lack of trust	2
turnover	2
it's true	2
lack of accountability	2
lack of clear communication	1
management	1
lack of diversity	1
concern that decisions are being made out of fear	1
environment does not foster creativity and innovation	1
lack of equality of roles	1
lack of resources/support	1
lack of transparency	1

[1] Bain & Company Net Promoter System.

Follow-up on Level 1 Reaction Questions

Sometimes it is useful to ask the same question at the end of a a program and then follow-up three months later on the same Reaction questions. The following is from a case study.

As shown in Table 1 below, at the end of a particular course participants indicated they would effectively apply the knowledge and skills learned in the course, scoring an average of 4.0 out of 5 – just below the target 4.5. Post-program follow-up, collected 60-days post-program, indicated that the observed effectiveness fell approximately 1 point below the 4.5 objective, result in an average of 3.58. Based on this drop may have occurred for reasons such as shift in job responsibility or lack of management support. Note: Respondents were matched and therefore, while the number of post-program respondents was less, the 12 responding were the same people same as 12 of the 18 responding at the end of the program.

Table 1. How effectively will you/have you applied the knowledge and skills learned in the program?

	Strongly Disagree 1	**2**	**3**	**4**	**Strongly Agree 5**	**Total**	**Goal**	**Average Rating**
End-of-Course Forecast (N=18)	1 5.6%	1 5.6%	4 22.2%	3 16.7%	9 50%	18 100%	4.5	4.0
Post-Program Follow-up (N=11)	1 8.3%	2 16.7%	2 16.7%	3 25%	4 33.3%	12 100%	4.5	3.58

When assessing the expected percentage of time requiring the knowledge and skills learned, the criticality of applying the content, and the percent of new knowledge directly applicable to the job, there was also a gap between expected and observed.

As shown in Table 2 respondents to the follow-up indicated slightly less work time requiring knowledge and skill. They also indicted that the criticality of applying the skills was slightly less. However, respondents indicated slightly higher use of skills than anticipated.

Table 2. Percent of Knowledge and Skills Applicable to Job

	Expected Mean (N=18)	Observed Mean (N=12)	Mean Difference
What percent of your total work time requires the knowledge and skills presented in this course?	53.33%	50.83%	-2.5
On a scale of 0% (not at all) to 100% (extremely critical), how critical is applying the content of this course to your job success?	67.78%	63.33%	-4.45
What percent of the new knowledge and skills learned from this course will you/did you directly apply to your job?	55.56%	64.17%	8.61

These two sets of data indicate that the skills learned were applicable to the job, although participant perception was that they were slightly less effective with the skills, although the time required and criticality was also less.

Level 1 ROI Forecast[2]

This process can best be described using an actual case. Global Engineering and Construction Company (GEC) designs and builds large commercial facilities like plants, paper mills, and municipal water systems. Safety is always a critical matter at GEC and commands much management attention. To improve safety performance, a safety leadership program was initiated for program engineers and construction superintendents. The program solution involved policy changes, audits, and training. Facilitated sessions focused on safety leadership, safety planning, safety inspections, safety meetings, accident investigation, safety policies and procedures, safety standards, and workers' compensation, all covered in a two-day session. Safety engineers and superintendents (the participants) were expected to improve the safety performance of their individual construction programs.

A dozen safety performance measures used in the company were discussed and analyzed in the two-day session. At the end of the session, participants completed a feedback questionnaire that probed specific action items planned as a result of the safety leadership program and provided estimated monetary values of the planned actions. In addition, participants explained the basis for estimates and placed a confidence level on their estimates. Table 1 presents the questions on the feedback questionnaire.

[2] Phillips, P. P., Phillips, J. J., Toes, K. (2024) *Return on Investment in Training and Performance Improvement Programs* 3rd edition. Abingdon: Routledge.

Table 1. Survey Questions to Forecast ROI at Level 1

1. As a result of this program, what do you estimate to be the increase in your personal effectiveness expressed as a percentage? _____ percent
2. Please indicate what you will do differently on the job as a result of this program. (Please be specific.)
   a. _____
   b. _____
   c. _____
3. What specific measures will improve? _____
4. As a result of any change in your thinking, new ideas, or planned actions, please estimate (in monetary values) the benefit to your organization (e.g., reduced absenteeism, reduced employee complaints, better teamwork, increased personal effectiveness) over a period of one year. $ _

a. What is the basis of this estimate? __

b. What confidence, expressed as a percentage, can you put in your estimate? (0 percent = No Confidence; 100 percent = Certainty) _____ percent

Table 2 presents data provided by the participants. Only 19 of the 25 participants supplied data. (Experience has shown that approximately 70–80 percent of participants will provide usable data on this series of questions.) The estimated cost of the program, including participants' salaries for the time devoted to the program, was $358,900.

Some of the monetary values of the planned improvements were extremely high, reflecting the participants' optimism and enthusiasm at the beginning of an important program. As a first step in the analysis, extreme data items were omitted (one of the Guiding Principles of the ROI Methodology). Data such as "millions," "unlimited," and "$4 million" were discarded, and each remaining value was multiplied by the confidence value and totaled. This adjustment is one way of reducing highly subjective estimates. The resulting tabulations yielded a total improvement of $990,125 (rounded to $990,000). The projected ROI, which was based on the feedback questionnaire at end of the two-day session, is:

$$\text{ROI} = \frac{(\$990{,}000 - \$358{,}900)}{\$358{,}900} \times 100 = 176\%$$

Although these projected values are subjective, the results were generated by program participants who should be aware of what they could accomplish. A follow-up study would

determine the actual results delivered by the group.

Table 2 Level 1 Data for ROI Forecast Calculations

Participant No.	Estimated Value	Basis	Confidence Level	Adjusted
1	$80,000	Reduction in lost-time accidents	90%	$72,000
2	91,200	OSHA Reportable injuries	80%	72,960
3	55,000	Accident reduction	90%	49,500
4	10,000	First-aid visits/visits to doctor	70%	7,000
5	150,000	Reduction in lost-time injuries	95%	142,500
6	Millions	Total accident cost	100%	—
7	74,800	Worker's compensation	80%	59,840
8	7,500	OSHA citations	75%	5,625
9	50,000	Reduction in accidents	75%	37,500
10	36,000	Worker's compensation	80%	28,800
11	150,000	Reduction in total accident costs	90%	135,000
12	22,000	OSHA Fines/citations	70%	15,400
13	140,000	Accident reductions	80%	112,000
14	4 million	Total cost of safety	95%	—
15	65,000	Total worker's compensation	50%	32,500
16	Unlimited	Accidents	100%	—
17	20,000	Visits to doctor	95%	19,000
18	45,000	Injuries	90%	40,500
19	200,000	Lost-time injuries	80%	160,000
			Total	**$990,125**

Level 2 Learning

Level 2 Observation Checklist[3]

Specific skills are listed. Observers rate the participant on capability with the task before they begin the program. At the end of program the observer rates the participant's skill. The difference is calculated and compared to a target.

Skills	Before Hands-On Practice	After Hands-On Practice	Difference	Target
1.				
2.				
3.				
4.				
5.				

Level 2 ROI Forecast[4]

Working with a cohort (or two) administer the test. Compare test scores to performance. If no correlation exists, reconsider the test items. If it does, use the data to forecast the ROI. Report the forecast ROI with care as it is merely a forecast and not an actual ROI.

For example, a large retail store chain implemented an interactive selling skills program. The program manager developed a test to predict sales performance based on the knowledge and skills taught in the program. At the end of the program, participants took the comprehensive test. To validate the test, the learning team developed a correlation between the test scores and actual sales from associates. Results showed that a strong and significant correlation existed.

When a second group of participants took the test, the average test score was 78, which correlated with a 17 percent increase in weekly sales. The average sales per week, per associate at the beginning of the program was $20,734. The profit margin was 4 percent and the cost of the program was $3,500 per person. The company considered a working year to include 48 weeks. To forecast the ROI, the program manager calculated the profit on the predicted increase in sales, annualized the change in performance, and compared the results to the

[3] Adapted from Wentz, M. and Hodges, T. (2005). Measuring ROI for A leadership Mastery Program: BMW Manufacturing. In Phillips, J. J. and Phillips, P. P. (editors*) ROI at Work*. Alexandria, VA: ASTD Press.

[4] Phillips, P. P. and Phillips, J. J., Toes, K. (2016) *Real World Training Evaluation*. Alexandria, VA: ATD Press.

program cost.

- Average sales for the group prior to the program — $20,734.00 per week
- Score of 78 on test predicts 17 percent increase in sales — $ 3,524.78 per week
- Profit on sales is 4 percent — $ 140.99 per week
- Annual increase in profit (profit x 48 weeks) — $ 6,767.52 annually
- ROI = $\frac{\$6,767.52 - \$3,500}{\$3,500} \times 100$ — 93%

By using the predictive validity of a test and comparing test scores to increase in weekly sales, the learning department predicted that this new group of participants could achieve a 93 percent ROI from increased sales resulting from the program.

Level 3 Application

Questionnaire: Example 1[5]

The following is from a very simple survey used as follow-up. There were five questions. The instrument included five questions. There were two Level 1 questions and three questions indicating use of skills (Level 3). For questions 1, 2, and 3, value ranged from 1 for strongly disagree to 5 for strongly agree. For questions 4 and 5, the value ranged from 0 percent to 100 percent. The latter data were used as part of the ROI analysis. The questionnaire was administered to a sample group of 45 participants three months post-program.

1. As a result of using the training, I have felt better prepared to do my job. (1=Strongly Disagree; 5=Strongly Agree)
2. The content of this course accurately reflects what happens on the job. (1=Strongly Disagree; 5=Strongly Agree)
3. To what degree (percent) do you believe the training has increased your ability to ____? (0% - 100%)
4. To what degree (percent) do you believe the training has increased your ability to _____? (0% - 100%)
5. I have had the opportunity to apply what I learned in the training (1=Strongly Disagree; 5=Strongly Agree)

[5] Hodges, T. M. (1997) Computer-Based Training for Maintenance Employees. In Phillips, J. J. (editor) *Measuring Return on Investment Volume 2*. Alexandria, VA: ATD Press.

Questionnaire: Example 2[6]

The instrument was designed for participant response. A similar instrument was used to collect data from managers. Questions included Level 1, Level 3, and Level 4 measures. Data were collected six months after the program. Emphasis was placed on the need to receive responses from most of the target audience. In the end they achieved a 73% response rate. This questionnaire demonstrates the variety of different questions that might be asked on a follow-up questionnaire including questions.

The case study with the questionnaire is available in the case study **Midwest Electric.**

Questionnaire: Example 3[7]

The following follow-up questionnaire was administered to two cohorts for a total of 36 participants. A similar questionnaire was administered to managers. Data were collected three months after the program. Note that the questionnaire includes Level 1, Level 2, Level 3, Level 4, and Level 5 questions (Level 5 questions get to the money). Participants were advised of the evaluation process at the beginning of the program. The evaluation team achieved an 81% response rate after employing 12 techniques to ensure a high response.

The program owner's approach to designing the program and the evaluation is detailed in the case study **Global Car Rental.**

[6] Phillips, P. P. and Phillips, J. J. (2018) Midwest Electric. In *Value for Money: Measuring the Return on Non-Capital Investments Case Studies*. ROI Institute.
[7] Phillips, P. P. and Phillips, J. J. (2018) Global Car Rental. In *Value for Money: Measuring the Return on Non-Capital Investments Case Studies*. ROI Institute.

Program Name _____ End Date of Program _____

Our records indicate that you participated in the above program. Your participation in this follow-up survey is important to the continuous improvement of the program. Completion of this survey may take 45 to 60 minutes. Thank you in advance for your input.

1. This survey requires some information to be completed in monetary value. Please indicate the currency you will use to complete the questions requiring monetary value. _____

2. Did you ⚪ complete ⚪ partially complete ⚪ not complete the program? If you did not complete, go to the final question.

	Agree 5	4	3	2	Disagree 1
3. I recommended the program to others.	⚪	⚪	⚪	⚪	⚪
4. The program was a worthwhile investment for my organization.	⚪	⚪	⚪	⚪	⚪
5. The program was a good use of my time.	⚪	⚪	⚪	⚪	⚪
6. The program was relevant to my work.	⚪	⚪	⚪	⚪	⚪
7. The program was important to my work.	⚪	⚪	⚪	⚪	⚪
8. The program provided me with new information.	⚪	⚪	⚪	⚪	⚪

	Agree 5	4	3	2	Disagree 1
9. I learned new knowledge/skills from this program.	⚪	⚪	⚪	⚪	⚪
10. I am confident in my ability to apply the knowledge/skills learned from this program.	⚪	⚪	⚪	⚪	⚪

11. Rate your level of improvement in skill or knowledge derived from the program content. A 0% is no improvement and a 100% is significant improvement. Check only one.

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪

	Agree 5	4	3	2	Disagree 1

12. I routinely apply the knowledge/skills learned during the program?

Frequently				Infrequently
5	4	3	2	1
⚪	⚪	⚪	⚪	⚪

13. How frequently did you apply the knowledge/skills learned during the program?

High				Low
5	4	3	2	1
⚪	⚪	⚪	⚪	⚪

14. What is your level of effectiveness with the knowledge/skills learned during the program?

⚪	⚪	⚪	⚪	⚪

15. Rate the effectiveness of the coach.

Critical				Not Critical
5	4	3	2	1
⚪	⚪	⚪	⚪	⚪

16. How critical is applying the content of this program to your job success?

Very Well				Not Well
5	4	3	2	1
⚪	⚪	⚪	⚪	⚪

17. To what extent did you stay on schedule with your planned actions?

18. What percent of your total work time did you spend on tasks that require the knowledge/skills presented in this program. Check only one.

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪	⚪

19. Which of the following deterred or prevented you from applying the knowledge/skills learned in the program? (check all that apply.)

- □ no opportunity to use the skills
- □ lack of management support
- □ lack of support from colleagues and peers
- □ insufficient knowledge and understanding
- □ lack of confidence to apply knowledge/skills
- □ systems and processes within organization will not support application of knowledge/skills
- □ other

20. If you selected “other” above, please describe here.

_____

21. Which of the following supported you in applying knowledge/skills learned in the program? (check all that apply.)

- □ opportunity to use the skills

□ management support
□ support from colleagues and peers
□ sufficient knowledge and understanding
□ confidence to apply knowledge/skills
□ systems and processes within organization will support application of knowledge/skills
□ other

22. If you selected "other" above, please describe here.

23. Please define the first measure you selected and its unit for measurement. For example, if you selected "sales," your unit of measure may be "1 closed sale."

24. For this measure, what is the monetary value of improvement for one unit of this measure? For example, the value of a closed sale is sales value times the profit margin ($10,000 x 20%=$2,000). Although this step is difficult, please make every effort to estimate the value of a unit. Put the value in the currency you selected, round to the nearest whole value, enter numbers only. (e.g. $2,000.50 should be input as $2,000.)

25. Please state your basis for the value of the unit of improvement you indicated above. In the closed sale example, a standard value, profit margin, is used, so "standard value" is entered here.

26. For the measure listed as most directly linked to the program, how much has this measure improved in performance? If not readily available, please estimate. If you selected "sales," show the actual increase in sales (e.g., 4 closed sales per month, input the number 4 here). You can input a number with up to 1 decimal point. Indicate the frequency base for the measure.

□ daily □ weekly □ monthly □ quarterly

27. What is the annual value of improvement in the measure you selected above? Multiply the increase (question 26) by the frequency (question 26) times the unit of value (question 24). For example, if you selected "sales," multiply the sales increase by the frequency to arrive at the annum value (e.g. 4 sales per month x 12 x 2,000=$96,000). Although this step is difficult, please make every effort to estimate the value. Put the value in the currency you selected, round to nearest whole value, enter numbers only. (E.g. $96,000.50 should be input as 96,000.)

28. List the other factors that could have influenced these results.

29. Recognizing that the other factors could have influenced this annual value of improvement, please estimate the percent of improvement that is attributable (i.e. isolated) to the program. Express as a percentage out of 100%. For example, if only 60% of the sales increase is attributable to the program, enter 60 here.

_____%

30. What confidence do you place in the estimates you have provided in the questions above? A 0% is no confidence, a 100% is certainty. Round to nearest whole value, and enter a number only (e.g. 37.5% should be entered as 38).
    _____%

31. Please define the second measure you selected and its unit for measurement. For example, if you selected "sales," your unit of measure may be "1 closed sale."

32. For this measure, what is the monetary value of improvement for one unit of this measure? For example, the value of a closed sale is sales value times the profit margin ($10,000 x 20%=$2,000). Although this step is difficult, please make every effort to estimate the value of a unit. Put the value in the currency you selected, round to nearest whole value, and enter numbers only (e.g. $2,000.50 should be input as $2,000).

33. Please state your basis for the value of the unit of improvement you indicated above. In the closed sale example, a standard value, profit margin, is used, so "standard value" is entered here.

34. For the measure listed as most directly linked to the program, how much has this measure improved in performance? If not readily available, please estimate. If you selected "sales," show the actual increase in sales (e.g., 4 closed sales per month, input the number 4 here). You can input a number with up to 1 decimal point. Indicate the frequency base for the measure. _____
    □ daily □ weekly □ monthly □ quarterly

35. What is the annual value of improvement in the measure you selected above? Multiply the increase (question 34) by the frequency (question 34) times the unit of value (question 32). For example, if you selected "sales," multiply the sales increase by the frequency to arrive at the annum value (e.g. 4 sales per month x 12 x 2,000=$96,000). Although this step is difficult, please make every effort to estimate the value. Put the value in the currency you selected, round to nearest whole value, and enter numbers only (e.g. $96,000.50 should be input as 96,000).

36. List the other factors that could have influenced these results.

37. Recognizing that the other factors could have influenced this annual value of improvement, please estimate the percent of improvement that is attributable (i.e. isolated) to the program. Express as a percentage out of 100%. For example, if only 60% of the sales increase is attributable to the program, enter 60 here.
    _____%

38. What confidence do you place in the estimates you have provided in the questions above? A 0% is no confidence; a 100% is certainty. Round to nearest whole value, and enter a number only (e.g. 37.5% should be entered as 38).
    _____%

39. What other benefits have been realized from this program?

40. Please estimate your direct costs of travel and lodging for your participation in this program. Put the value in the currency you selected, round to nearest whole value, and enter numbers only (e.g. $10,000.49 should be input as $10,000).

41. Please state your basis for the travel and lodging cost estimate above.

Level 3 ROI Forecast[8]

A Level 3 ROI Forecast was applied to a study describing the value of a manager development program focused on managers of hybrid teams. The cohort represented several different organizations. Utility analysis is useful in forecasting the ROI when business data are not present.[9] Input into this analysis includes:

- Percentage of the job requiring the specific skills learned in the program
- Increased proficiency in the skills learned
- The program's attribution to the improvement in proficiency, adjusted for error
- Team member salary, including benefits factor
- Program cost

Table 3 shows the specific questions asked on the post-program questionnaire that provided the data for the ROI forecast. An increase in job contribution assumes that improvement in business measures will follow. Therefore, the increase is the basis for forecasting the ROI. This increase is converted to money using fully loaded labor costs (salary plus benefits) and compared to the cost of participating in the program.

Eighty-seven people were actively enrolled in the program. Fifty-six participants responded to the post-program questionnaire, including the questions in the table. To keep estimates conservative, those responses that appeared to be extreme in comparison to the group (e.g., 100 percent improvement in proficiency) were not used in the analysis. This left us with data from 42 respondents.

As shown in Line E of the table, participants responding perceived their increase in job contribution to be 15.2 percent. This suggests that, based on participant perception of what

[8] Ray, R. R., Ulrich, D., Todd, A., and Phillips, P. P. (2022). *Effective Leadership in a Hybrid World of Work.* New York, NY: The Conference Board.

[9] For more information on forecasting ROI and the use of utility analysis, see Jack J. Phillips, and Patti P. Phillips, *Handbook of Training Evaluation and Measurement Methods*, 4th edition. New York, NY: Routledge (2016), pp. 321-343.

they gained from the program and how much their job requires the skills, participants are contributing 15.2 percent more to the job.

Table 3. Increase in Job Contribution Resulting from Improved Proficiency as Reported by Participants (n=42)

During Leading in a Hybrid Work Environment, you learned nine new skills.	
• Conduct an effective virtual coaching session • Perform a check-in conversation for the purpose of building trust and rapport • Demonstrate empathy for team members • Provide meaningful real-time feedback • Identify skills team members need to succeed in the future • Embedding Diversity, Equity, and Inclusion (DEI) into team culture • Conduct a meaningful stay interview • Strengthen employees' commitment to the organization • Improve employee experiences	
A. Overall, how much of your current job requires the use of all nine skills?	75.2%
B. Overall, how much more proficient are you with these skills since participating in the program?	45.9%
C. Given that other factors can influence proficiency in skills and capability, how much of your gain in proficiency is due to your participating in this program?	56.5%
D. How confident are you in the estimates you just provided?	77.9%
E. Contribution to the organization (A x B x C x D = E)	15.2%

To complete the analysis, we estimated that the average fully loaded labor cost of those participating in the program is $135,000 (Line F) in Table 4. Multiplying this by the job contribution results in an average monetary benefit per person of $20,520 (Line G).

Participants and their respective companies were not charged for this program. However, under normal circumstances, there would be a fee. Leadership development programs that include content delivery, coaching, and access to resources for up to one year can be expensive, particularly when customized to the specific needs of an organization and involving a large cohort.[10] Also, by standard, program costs are fully loaded and account for fees, time in the program, time required for assignment completion, and other activities associated with the program. For purposes of this forecast, the estimated cost is $5,000 based on the typical fee of an online program plus assumed cost of time to participate and complete course requirements. Table 2 completes the analysis by multiplying the increase in job contribution to an assumed fully loaded salary and program cost. This results in a possible ROI of 310%. This ROI suggests for every dollar spent on the program has the potential of returning the dollar investment plus an additional $3.10.

Table 4. ROI Calculation

Contribution to the organization (A x B x C x D = E)	15.2%
F. Estimated salary $100,000 plus 35% benefits factor	$135,000
G. Average monetary benefits to the organization (E x F = G)	$20,520
H. Estimated fully loaded costs (registration fee, participant time to complete coursework, materials, etc.)	$5,000
ROI = [(G – H) / H] x 100	310%

Techniques to Improve Response Rates[11]

The following is a list of techniques program evaluators have used to increase response rates.

- ❑ Provide advance communication.
- ❑ Communicate the purpose.
- ❑ Identify who will see the results.
- ❑ Describe the data integration process.

- ❑ Let the target audience know that they are part of a sample.
- ❑ Add emotional appeal.
- ❑ Design for simplicity.

[10] Phillips, P. P., Phillips, J. J., and Ray, R. L. (2015) Measuring the Success of Leadership Development: A Step-by-Step Guide for Measuring Impact and Calculating ROI. Alexandria, VA: ATD Press.
[11] Phillips, P. P. and Phillips, J. J., Aaron, B. (2013) *Survey Basics*. Alexandria, VA: ASTD Press.

- ❑ Make it look professional and attractive.
- ❑ Use the local manager support.
- ❑ Build on earlier data.
- ❑ Pilot test the questionnaire.
- ❑ Recognize the expertise of participants.
- ❑ Consider the use of incentives.
- ❑ Have an executive sign the introductory letter.
- ❑ Send a copy of the results to the participants.
- ❑ Report the use of results.
- ❑ Provide an update to create pressure to respond.
- ❑ Present previous responses.
- ❑ Introduce the questionnaire during the program.
- ❑ Use follow-up reminders.
- ❑ Consider a captive audience.
- ❑ Consider the appropriate medium for easy response.
- ❑ Estimate the necessary time to complete the questionnaire.
- ❑ Show the timing of the planned steps.

- ❑ Personalize the process.
- ❑ Collect data anonymously or confidentially.

When planning data collection, consider the techniques you will use before administering the questionnaire, during the evaluation period, and after the questionnaire closes.

Before administering the survey

- Design for confidentiality, simplicity, and ease of completion
- Describe the time it will take to the complete the survey
- Provide a due date (3 weeks before launch)
- Decide on incentives for early response consistent culture and practices
- Program Manager send announcement
- Program Manager send link to respondents

During the response period

- Send a reminder with survey link
- Send a reminder with survey link and up-to-date response rate
- Send final reminder with survey link, up-to-date response, and announcement of close

After the response period

- Send thank you for responding with final response rate
- Send brief overview of results and plan for their use
- Send summary of actions taken based on results

Level 4 Impact

ROI Institute Chain of Impact Questions (the basic framework – see notes)

Option 1: Impact Measure is Unknown

1. How did you use the material from this project or program?
2. What influence did it have in your work? Team?
3. What specific measure was influenced? Define it.
4. What is the unit value of the measure? (Profit or Cost)
5. What is the basis of this value?
6. How much did the measure change since the project was implemented?
7. What is the frequency of the measure? Daily, weekly, monthly, etc.
8. What is the total annual value of the improvement?
9. List the other factors that could have caused this total improvement?
10. What percent of the total improvement can be attributed to this project?
11. What is your confidence estimate, expressed as a percent, for the above data? 0%= no confidence; 100% = certainty

Option 2: Impact Measure Is from a Set

1. To what extent did this project or program positively influence the following measures:

	Significant Influence				No Influence	
	5	4	3	2	1	N/A
Productivity	•	•	•	•	•	•
Sales	•	•	•	•	•	•
Quality	•	•	•	•	•	•
Cost	•	•	•	•	•	•
Efficiency	•	•	•	•	•	•
Time	•	•	•	•	•	•
Employee Satisfaction	•	•	•	•	•	•
Customer Satisfaction	•	•	•	•	•	•
Other	•	•	•	•	•	•

2. What other measures were positively influenced by this project?
3. Of the measures listed above, which one is most directly linked to the project? (check only one)

- Productivity
- Sales
- Quality
- Cost
- Efficiency
- Time
- Employee Satisfaction
- Customer Satisfaction
- Other

4. Please define the measure above.
5. Indicate the specific unit of measurement.
6. How much did this measure improve since you began this project?
7. What is the frequency of the measure? • daily • weekly • monthly • annually
8. For this measure, what is the monetary value of improvement for one unit of this measure? Although this is difficult, please make every effort to provide the value.
9. Please state your basis for the estimated value of one unit of improvement you indicated above.
10. What is the total annual value of improvement in the measure you selected above?
11. List the other factors that have caused this total annual improvement.
12. Recognizing that other factors may have caused this improvement, estimate the percent of improvement related directly to this project of program.
13. What confidence do you place in the estimates you have provided in the prior questions? (0% is no confidence, 100% is certainty.)

Option 3: Impact Measure is Known

1. Please define the first measure connected to your project.
2. Define the unit of measure.
3. For this measure, what is the monetary value of improvement for one unit of this measure?
4. Please state your basis for the value of the unit of improvement you indicated above.
5. For the measure listed as most directly linked to the program, how much has this measure improved in performance?
6. Indicate the frequency base for the measure. Daily, weekly, monthly, quarterly.
7. What is the annual value of improvement in the measure you selected above? Multiply the increase (Question 5) by the frequency (Question 6) times the unit of value (Question 4).
8. List the other factors that could have influenced these results.
9. Recognizing that the other factors could have influenced this annual value of improvement, please estimate the percent of improvement that is attributable (or isolated) to the program. Express your estimate as a percentage out of 100%.
10. What confidence do you place in the estimates you have provided in the questions above? (100% = certainty; 0% = no confidence)

Level 5 ROI

Data Conversion Techniques

Calculating the ROI for talent development programs requires that the impact measures be converted to money. Below are the techniques to convert measures to money.

- **Output data** is converted to profit contribution or cost savings, based on its unit contribution to profit or the unit contribution to cost reduction. Standard values for these items are readily available in most organizations.
- The **cost of quality** is calculated, and quality improvements are directly converted to cost savings. Standard values for these items are available in many organizations.
- For programs where employee time is saved, the **participants' wages and benefits** are used to develop the value for time. This is a standard formula in most organizations.
- **Historical costs**, developed from cost statements, are used when they are available for a specific variable. In this case, organizational cost data establishes the specific monetary cost savings of an improvement.
- When available, **internal and external experts** may be used to estimate a value for an improvement.

- **External databases** are sometimes available to estimate the value or cost of data items. Research, government, and industry databases—usually available on the Internet—can provide important information for these values.
- **Participants estimate** the value of the data item. For this approach to be effective, participants must be capable of providing a value for the improvement.
- **Supervisors and managers provide estimates** when they are both willing and capable of assigning values to the improvement.
- **Soft measures are linked, mathematically, to other measures** that are easier to measure and value. This approach is helpful when establishing values for measures that are difficult to convert to monetary values, but have linkages to other measures.
- **Learning staff estimates** may be used to determine a value of an output data item. All data can be converted to monetary value. Soft measures can be linked to hard data. Ultimately all measures are converted to either profit, cost savings or cost avoidance.

Fully-Loaded Cost Profile

When impact studies are conducted and the costs of training are needed for ROI, the costs must be fully loaded (include all direct and indirect costs). The typical cost categories are:

- the cost for **needs assessment** and the cost to **design** and **develop** the program, possibly prorated over the expected life of the program
- the cost of all **program materials** provided to each participant
- the cost for the **instructor/facilitator**, including preparation time as well as delivery time
- the cost of the **facilities** for the learning program
- **travel, lodging, and meal costs** for the participants, if applicable
- **salaries**, plus employee **benefits** of the participants for the **time** they are involved in the learning program
- **administrative and overhead costs** of the L&D function, allocated in some convenient way
- the costs of **evaluation**.

Some costs are prorated, others are expensed:

Cost Item	Prorated	Expensed
Initial analysis and assessment	✔	
Development of solutions	✔	
Acquisition of solutions	✔	
Implementation and application		
Salaries/benefits for program team time		✔
Salaries/benefits for coordination time		✔

Salaries/benefits for participant time (if appropriate)		✔
Program materials		✔
Hardware/software	✔	
Travel/lodging/meals		✔
Use of facilities		✔
Capital expenditures	✔	
Maintenance and monitoring		✔
Administrative support and overhead	✔	
Evaluation and reporting		✔

Case Studies