INDEX

A
AB design, 189
ABC . . . D . . design, 189
Accuracy standards
  analysis of qualitative information, 129
  analysis of quantitative information, 128
  context analysis, 127
  justified conclusions, 129
  reliable information, 128
  valid information, 127–128
Ackoff, Russell L., 160
Action recommendations.
  See Recommendations
Adams, C., 142
ADDIE model, 9, 274, 281
Adjusting performance, 253–254
Adler, P. A., 161
Alliger, G. M., 48
Altschuld, J. W., 93
American Evaluation Association (AEA),
  120, 122
Andrei, H., 281
ANOVA (analysis of variance), 214
Apking, A. M., 77
Artifacts
  data collection using, 192
  error of the, 245
Assessment
  needs, 12–13r, 25, 33
  standard for complete and fair, 126
  See also Evaluation
  Association error, 243
  Average performer error, 246
B
Bache, A. P., 49
Baldwin, T. T., 53
Bar graphs, 210, 211fig
Bassi, L. J., 49
Bates, R., 54, 69
BCR (benefits-cost ratio), 67
Beer, S., 275
Begemann, C., 276
Behavioral engineering model, 271–272
Bell curve, 209fig
Belton, V., 275
Benson, G., 49
Berk, R. A., 180, 181
Berrah, L., 272
Bias (observation), 163–164
Bittici, U. S., 276
Blake, B. E., 70
Blenkinsop, S. A., 275
Blind spot error, 245
Bloom, B. S., 180, 181
Bloom’s taxonomy, 181
Borg, W. R., 171
Brethower, D. M., 8, 189
Brewer, J., 128
Brignall, S., 142
Brinkerhoff, R., 42, 52, 69, 75, 76, 77
  See also SCM (case success model)
Campbell, D. T., 189
Carrie, A. S., 276
Carroll, A., 9
Cascio, W. F., 47
Center for Instructional Research and
  Curriculum Evaluation (University of
  Illinois), 228
Cheney, S., 49
CIPP model
  applicability in formative/summative
  evaluations, 110r
  articulating program core values/solutions,
    111–112
  on context evaluation, 108
  on input evaluation, 109
  introduction to, 5, 43, 107–108
  methods used in, 112
  PORO application example of, 113–115
  on process evaluation, 109
  on product evaluation, 109–111
  strengths and limitations of, 113
  See also Stufflebeam, D.
Clark, R., 280, 282
Clark, R. E., 280, 282
Closed-ended questions, 176–177
Coghlan, D., 253
Communicating findings
  developing the report for, 226–235
  importance of, 221–222
  recommendations component of, 96,
    216fig, 222–226
  Complete and fair assessment standard, 126
Concoran, C., 62
Confidentiality agreement, 268
Conflict of interest standard, 126–127
Construct validity, 183
Consulting retainer contract, 260
Consumer-oriented evaluation model, 40, 82
Content-related validity, 182
Context analysis standard, 127
Context evaluation, 108
Context standards
analysis of qualitative information, 129
analysis of quantitative information, 128
context analysis, 127
justified conclusions, 129
reliable information, 128
valid information, 127–128
Continual improvement
adjusting performance for, 253–254
definition of, 250
monitoring performance for, 250–253
role of leadership in, 254–255
Contracting. See Evaluation contract
Converse, J., M., 175
Cooperrider, D. L., 6
Correlation coefficient, 212–213
Cost-benefit evaluation, 20
Cost-effectiveness evaluation, 20
cost-effectiveness standard, 125
cost-plus-fixed-fee contract, 259
“Course Improvement Through Evaluation” (Cronbach), 5
Cowan, D. A., 272
Cresswell, A., 62
Criterion-references tests, 180–182
Criterion-related validity, 183
Critical incident technique, 171–172
Cronbach, L., 4, 5, 43
Cronbach’s alpha, 128
Cross, K. F., 142
Cummings, T. G., 254
Customer satisfaction, 90–91

D
Da Silveira, G., 277
Data
collecting postprogram, 63
converting to monetary values, 65–66
defining from performance objectives, 139, 141
definition of, 134
graphical representations of, 210–212fig
hard, 135
linkages between results and required, 145r–147r
qualitative, 95, 129, 136–137, 171, 196–197
quantitative, 95, 128–129, 136–137
relevance, reliability, validity of, 135–137
scales of measurement for, 137–138r
soft, 136
See also Evaluation questions; Information;
Measurable indicators
Data analysis
graphical representations used in, 210–212fig
inferential statistics used in, 214–217
interpretation component of, 217–218
linking recommendations, findings,
interpretations and, 234–235
measures of relationship in, 212–214
progression to recommendations for action from, 216fig
qualitative, 196–197
quantitative, 199–210fig
selecting tools for, 93–96
standard for, 128–129
structured discussion, 197–199
Data collection
document-centered methods, 191–192
error of the instrument, 244
experimental research, 186–190
importance of, 159–160
instrument-centered methods, 172–178
person-centered direct observation methods, 161–166
person-centered indirect observation techniques, 166–172
plan flow for, 140r
selecting methods of, 92–93
standards on, 123–124
treatment-centered methods, 184–186
Data sources
finding, 152–155
identifying, 92
for specific data categories, 154r–155r
Davies, J., 20
Davis, L., 21
Decision making
evaluation question decision string for, 29–30
performance gap reduced through, 272–273
performance measurement systems (PMSs) tool for, 273–277
performance monitoring role in, 271–273
Delivery and acceptance, 262
Delphi technique, 169–170
Deming, W. E., 94
Demonstration, 233
Dennett, D. C., 48
Descriptive statistics
described, 200
measures of central tendency, 201–204
measures of dispersion (variability), 204–210

“Development of a Plan to Measure Return on Investment of Educational Programs at Providence Hospital” (Blake), 70–73

Dick, W., 54

Direct observation. See Person-centered direct observation methods

Discrepancy evaluation model, 5, 41, 83

Displacement shift error, 245

Dissemination. See Communicating findings

Division of Blind Services (DBS) case study, 148–151

Document-centered methods

artifacts and work products, 192

extant data review, 191

literature review, 192

Doucouliagos, C., 68, 69

Drucker, P., 24

Dumas, J. S., 227

E

Eccles, R. G., 275

Eckerson, W., 253

Educational Evaluation and Decision Making (Stufflebeam et al.), 107

Efficiency (or process) evaluation, described, 19

Eisenhardt, K., 272

Employee satisfaction, 91

Ends

definition of, 25, 32

definition of societal, 22

evaluation comparison of intentions with, 32–33

Environmental Protection Agency, 152

“Equivalent of alternate forms” method, 184

Errors of logic, 242–243

Errors of procedure, 244–246

Errors of system mapping, 240–242

Estes, F., 282

Ethical issues, 262

Evaluation

benefits of, 24–25

brief overview of history of, 4–5

communicating findings of, 96, 216

definition of, 240

ensuring ownership and commitment to, 23–24

ensuring stakeholders’ buy-in, 9–10

experimental research relationship to, 185–186

formative, 15, 17, 18, 110

performance improvement role of, 281–282

purpose and definition of, 5–8

reasons for conducting, 7

relationship to other investigative processes, 11–15

simulation and gaming used for, 190

standards used for, 119–120

summative, 15, 17, 18–20, 110

terminality related to, 25–26

timing of, 15, 17–18

See also Assesment; Meta-evaluation; Performance-based evaluation

Evaluation contract

consulting retainer, 260

cost-plus-fixed-fee, 259

ethics and professionalism elements of, 262

fixed-price, 258–259

overview of, 258

time-and-materials, 259–260

Evaluation contract controls

delivery and acceptance, 262

management plan, 261

other contract clauses, 261

program review, 261–262

schedule and work breakdown structure, 262

scope of work, 260–261

statement of work, 261, 262–268

Evaluation errors

logic, 242–243

procedure, 244–246

system mapping, 240–242

Evaluation impact standard, 124

Evaluation models

Brinkerhoff’s SCM (case success evaluation), 42, 75–80

cost-plus-fixed-fee, 259

cost-plus-fixed-fee, 259

conceptualizing fit between situation and, 44–45

cost-plus-fixed-fee, 259

evaluation of, 244–245

Guerra-López’s impact, 42, 81–104

historic overview of, 5

Kirkpatrick’s four levels, 42, 47–58

Patton’s utilization-focused, 42

Phillips’s ROI methodology, 42, 61–73

Provus’s discrepancy, 5, 41, 83

Scriven’s consumer-oriented, 40, 82

Scriven’s goal-free, 5, 15, 41, 162

selecting, 43

self-evaluation framework, 250–253

Stake’s responsive/client-centered, 5, 41

Stufflebeam’s CIPP, 5, 43, 107–115

Tyler’s objective-based, 40

Evaluation Network, 120

Evaluation questions

asking the right, 28–32
Evaluation questions (continued)
coming from various perspectives and stakeholders, 87–88
decision string of, 29–30
evaluation study are driven by, 35
follow-up, 155–157
open- and closed-ended, 176–177
process string of, 29
societal string of, 29
system string of, 30
See also Data; Questionnaires/surveys
Evaluation Research Society, 120
Evaluators
AEA principles for, 120, 122
challenges faced by, 20–22
competencies of, 11
contracting with, 257–268
ethics and professionalism of, 262
functions of, 13
as job versus role, 10–11
observation bias by, 163–164
recommendation implementation role of, 235–236
See also Meta-evaluators
Executive briefing, 232–233
Experimental design
basis of, 186–187
examples of typical, 187t–188
variations of time-series, 189
Experimental research
designing, 186–188, 189
problems with classic, 188
relationship between evaluation and, 185–186
time-series, 188–190
Expert error, 242
Explanation creep error, 243
Extant data review, 191
F
Face validity, 182–183
Fair assessment standard, 126
False conclusion error, 242
Feasibility standards
cost-effectiveness, 125
meeting propriety, 125
political viability, 124–125
service orientation, 125–126
Ferrington, J., 280, 282
Findings. See Communicating findings
Fitzgerald, L., 142
Fitzpatrick, J. L., 4, 5, 39, 40, 119, 120
Fixed-price contract, 258–259
Focus groups
conducting, 166–167
samples used for, 167–168
Follow-up evaluation questions, 155–157
Ford, J. K., 53
Forked path error, 246
Formative evaluations
CIPP model applicability to, 110t
described, 15, 17, 18
timing and issues of, 17
Foxon, M., 52
Freedman, M., 21
G
Gage, N. L., 189
Gall, M. D., 171
Games, 189–190
Gharajedaghi, J., 83
Gilbert, T. F., 8, 49, 92, 271
Gilbert’s behavioral engineering model, 271–272
Goal-free evaluation model, 5, 15, 41, 82, 162
Goals
based on valid organization needs, 33–34
definition of, 26
needs assessment to determine, 33
See also Objectives
Grady, M. W., 275
Graphical data representations, 210–212t
GRE (Graduate Record Examination), 183
Guba, E., 5, 6, 185
Guerra, I., 13, 50, 86, 91, 92, 93, 135, 138, 148, 170, 257, 262, 281
Guerra-López, I., 6, 41, 42, 81, 84, 96, 112, 281
See also Impact evaluation process
Handbook of Human Performance Technology (Pershing), 281
Hard data, 135
Harless, J., 8, 272
Henderson, A., 20
Hofstadter, D. R., 48
Holton, E., 54
Howick, S., 275
Huberman, A. M., 197
Human Competence: Engineering Worthy Performance (Gilbert), 8
Human subject rights standard, 126
Hunter, A., 128
I
Impact evaluation
definition of, 19
impact evaluation process model, 42, 81–104
Impact evaluation process
comments on, 96
elements of the, 83–96
illustrated diagram of, 84
introduction to, 42, 81–83
strengths and limitations of, 97
TVC (Visionary Corporation) application example of, 97–104
See also Guerra-López, I.
Impact evaluation process steps
1: identify stakeholders and expectations, 84–86
2: determine key decisions and objectives, 86–91
3: deriving measurable indicators, 91–92
4: identifying data sources, 92
5: selecting data collection methods, 92–93
6: selecting data analysis tools, 93–96
7: communication of results and recommendations, 96
Indirect observation. See Person-centered indirect observation methods
Inferential statistics described, 201
parametric and nonparametric, 214–217
Information definition of, 134
included in written reports, 229–230
standards for, 127–129
standards for collecting, 123–124
See also Data
Input evaluation, 109
Instructor-made tests, 179–180
Instrument errors, 244
Instrument-centered methods choosing the right instrument, 172–174
overview of, 172
questionnaires and surveys, 174–178
International Society for Performance Improvement (ISPI), 9, 279
Interpretation data analysis, 217–218
linking recommendations, findings, data analysis, and, 234–235
Interval measurement level, 137, 138
Interview methods, 170–171
Investigative processes common elements of all, 14–15
dimensions of, 16
evaluation relationship to other, 11–15
needs assessment, 12r–13r, 25
IRHTP (Interdisciplinary Rural Health Training Program) evaluation case background information on, 122
findings of, 123–129
methodology used in, 122–123
“Item-objective congruence,” 181
J
Janak, E. A., 48
Johnson, T. R., 49
Johnston, R., 142
Joint Committee on Standards for Educational Evaluation, 119–120
Juran, J., 94
Justified conclusions standard, 129
K
Kaplan, R. S., 142, 276
Kaufman’s organizational elements model, 82
Keller, J. M., 55
Kennerly, M., 142
Key Evaluation Checklist, 40
King, D., 54
Kirkpatrick, D., 42, 47, 49, 50, 52, 53
Kirkpatrick’s four levels of evaluation application example of, 56–58
comments regarding, 54–55
introduction to, 42, 47–49
Kaufman and Keller’s variation of, 55
level 1: reactions, 47, 48
level 2: learning, 48
level 3: behavior transfer, 48
level 4: results, 48
Phillips’s expansion of, 61–62
“reactionnaires” forms used in, 174
strengths and limitations of, 55–56
Knowledge of Health Care Disciplines Questionnaire, 128
Kuder-Richardson formula, 184
L
Lavigne, M., 62
Leadership accountability demands by, 282
continual improvement and role of, 254–255
Levels of result, 25
Lick, D., 254
Likert scales attitudinal surveys using, 137, 184
Kirkpatrick’s level 1 reactions using, 49
mean of, 202
median of, 203
questionnaire items, 136
Lincoln, Y., 5
Line charts, 210–211
Liston, C., 4
Literature review, 192
local value error, 241–242
Logic errors
of association, 243
of the expert, 242
of explanation creep, 243
false conclusion, 242
of the quick fix, 243
wishful thinking, 243
Lynch, D., 122
Lynch, R. L., 142

M
Madaus, G., 40
Mager, R. F., 139
Management by walking around, 161
Management plan, 261
Market share increase, 90
Maskell, B., 1424
Mauris, G., 272
Mckinsey, 21
McLaughlin, S. D., 49
McMillan, J. H., 136
Mean, 201–202
Means
definition of, 25, 32
of evaluation process, 32–33
Measurable indicators
CIPP framework of, 114
commonly used financial, 142–143
definition of, 141–142
deriving, 91–92, 141–152
general categories of commonly used, 143r–144r
vocational rehabilitation case study on, 148–151
See also Data
Measurement
central tendency, 201–204
data analysis of relationship, 212–214
dispersion (variability), 204–210
error of, 244
levels of, 137, 138r
Likert scales, 49, 136, 137, 184, 202, 203
observation methodology and purpose of, 160–186
performance, 271–277
performance improvement role of, 281–282
See also Statistics
Measures of central tendency
the mean, 201–202
the median, 202–203
the mode, 202–204
Measures of dispersion (variability)
the normal curve, 208–210
the range, 204–206
the semi-interquartile range, 206
the standard deviation (SD), 206–208
Median, 202–203
Merit (CIPP model), 108
Meta-evaluation
AEA principles for evaluators, 120, 122
definition of, 118–119
importance of, 118
IRHTP application example on, 122–129
standards used for, 119–120, 121r
See also Evaluation
Meta-evaluators
essential qualifications for, 119
See also Evaluators
Miles, M. B., 197
Minnesota Multiphasic Personality Inventory, 183
Misattribution error, 241
Missing player error, 241
Mode, 203–204
Mohr, L. B., 139
Monitoring performance
continual improvement by, 250–251
organizational decision making and role of, 271–277
self-evaluation framework for, 251–253
Montmain, J., 272
Myers-Briggs test, 183

N
National Centre for Vocational Education Research (Australia), 68
Needs
definition of, 22, 25
organization goals/objectives based on valid, 33–34
using top-down approach to derive valid, 34
Needs assessment
definition of, 25
objectives/goals determined by, 33
unique perspectives of, 12r–13r
Needs assessors, 13
Neely, A., 142, 275, 276
Negatively skewed distribution, 210
Nevo, D., 44
Newby, A., 174
Niven, P. R., 144, 152, 155
Noe, R. A., 53
Nominal group technique, 168–169, 170r
Nominal measurement level, 137, 138r
Nondisclosure agreement, 268
Nonparametric inferential statistics, 214–217
Nonstructured direct observations, 163
Norm-referenced tests, 182
Normal curve, 208–210
Norton, D. P., 142, 276
Nutt, P., 272, 273, 275
Objective-based evaluation model, 40

Objectives
- based on valid organization needs, 33–34
- congruence between test items and, 181
- defining required data from performance, 139, 141
- definition of, 26
- determining key decision and, 86–91
- needs assessment to determine, 33
  See also Goals

Observation bias, 163–164
Observation methodology
- instrument-centered, 172–178
- person-centered direct, 161–166
- person-centered indirect observation techniques, 166–172
- reliability and validity of tests, 182–184
- rules for, 161
- traditional knowledge testing, 179–182
- treatment-centered, 184–185
Obtrusive direct observations, 162–163
OMT (outdoor management training) programs
- description of, 56–57
- evaluation of, 57–58
Open-ended questions, 176, 177
Oral reports/presentations, 232–233
Ordinal measurement level, 137, 138
Organizational elements model, 82
Organizational mission, 34
Organizational vision
- definition of, 34
- Kaufman’s ideal, 112
- value-added, 89–90

An Ounce of Analysis Is Worth a Pound of Objectives (Harless), 8, 272

Parametric inferential statistics, 214–217
Parker, R. A., 174
Participant observation, 164–166
Patton, M. Q., 5, 42, 75, 123
Patton’s utilization-focused evaluation model, 42
Performance
- adjusting, 253–254
- definition of, 25
- monitoring, 250–253
- role of leadership in improving, 254–255
Performance dashboards, 274
Performance gaps, 272–273
Performance improvement
- ADDIE model for, 9, 274, 281
- a conceptual framework for, 8–9
- definition of, 9, 25
- evaluation and measurement in, 281–282
- future of evaluation, 279–283
- ISPI definition of, 279–280

Performance Improvement Journal (PIJ), 281, 282

Performance Improvement Quarterly (PIQ), 281, 282
Performance measurement systems (PMSs)
- ADDIE approach adopted for, 274
- description of, 273
- Gilbert’s approach to, 273
- issues and challenges of, 275–277
- performance dashboards for, 274
Performance pyramid, 142
Performance-based evaluation
- overview of, 27–28
- principles of, 27–35
  See also Evaluation
Performance-based evaluation principles
1: asking the right questions, 28–32
2: evaluation as function of obtained results, 32–33
3: organizations objectives should be based on valid needs, 33–34
4: derive valid needs using top-down approach, 34
5: every organization should aim for the best, 34–35
6: evaluation questions drive the evaluation study, 35

Pershing, J., 8, 9, 280, 281
Person-centered direct observation methods
- acceptance by the group, 165
- bias problem of, 163–164
- effects of participation, 165–166
- obtrusive versus unobtrusive, 162–163
- overview of, 161–162
- participant, 164–165
- structured versus nonstructured, 163
- “surplus meaning” problem of, 164

Person-centered indirect observation methods
- critical incident technique, 171–172
- Delphi technique, 169–170
- focus groups, 166–168
- interview methods used for, 170–171
- nominal group technique, 168–169, 170

Peters, T. J., 161
Phi Delta Kappa National Study Committee on Evaluation, 6, 107
Phillips, J., 42, 61, 62, 63
  See also ROI methodology
Pie charts, 212
Platt, W. A., 92, 135, 138, 170, 257, 262
Political viability standard, 124–125
Popham, W. J., 43
Population masking error, 246
PORO (Guidance Program for Job Search) evaluation case, 113–115
Positively skewed distribution, 210
Postprogram testing, 54
Pre-program testing, 54
Presser, S., 175
Problem solving assumptions, 7
Procedure errors, 244–246
Process (or efficiency) evaluation, 19, 109
Product evaluation, 109–111
Professional ethics, 262
Program review, 261–262
Propriety standards
  complete and fair assessment, 126
  conflict of interest, 126–127
  rights of human subjects, 126
  service orientation, 125–126
Provus, M., 5, 41, 83
Provus’s discrepancy evaluation model, 5, 41, 83
Public forum, 233
Pyburn, P. J., 275

Qualitative data
  critical incident technique for collecting, 171
  data analysis of, 196–197
  description of, 95, 136–137
  standard on analysis of, 129
Quantitative data
  analysis of, 199–210
  description of, 95, 136–137
  standard on analysis of, 128
Quantitative data analysis
  examples of purposes of, 199–200
  measures of central tendency, 201–204
  measures of dispersion (variability), 204–210
  statistics used in, 200–210
Questionnaires/surveys
  basic types of items used in, 175–176
  as data collection instrument, 174–175
  length of, 178
  Likert-scale, 137
  open- and closed-ended questions used in, 176–177
  other types of question formats used in, 177
  structure of, 177–178
  See also Evaluation questions
Quick fix error, 243

Range (or spread), 204–206
Ratio measurement level, 137, 138
Rea, L. M., 174

“Reactionnaires,” 174

Recommendations
  communicating findings and, 222–223
  considerations for implementing, 225–226
  evaluator’s possible role in implementing, 235–236
  framework for identifying and presenting, 223–224
  impact evaluation process on communicating, 96
  linking to interpretations, findings, data analysis and, 234–235
  progression from analyzed data to, 216
  reporting the, 226–235
Redish, J., 227
Relationship measures, 212–214
Relevant data, 135
Reliability
  of data, 135
  standard for information, 128
  testing, 182–184
Reliable information standard, 128
Repeated AB design, 189
Report development
  clarifying stakeholders’ responsibilities, 235
  evaluator’s role after the report, 235–236
  format decisions, 228
  identifying the key message, 233–234
  knowing the audience, 227–233
  language elements of, 227–228
  linking evaluation components, 234–235
  oral reports, 232–233
  overview of, 226–227
  written reports, 229–232
Research. See Experimental research
Responsive/client-centered evaluation model, 5, 41
Results evaluation, 19
Reversal/ABA designs, 189
Richards, L., 197
Richards, T., 197
ROI methodology
  application example of, 70–73
  calculating ROI of program, 67
  collecting postprogram data, 63
  comments on the, 67–69
  converting data to monetary values, 65–66
  identifying intangible benefits of program, 67
  introduction to, 42, 62–63
  isolating effects of training, 64–65
  Kirkpatrick’s four levels model expanded by, 61–62
  strengths and limitations of, 70
  tabulating program costs, 66–67
  See also Phillips, J.
ROI (return on investment)
calculation for, 67
concept and applications of, 68
Rowland, C., 56
Rowland/Diamond, 56
Rummler, G. A., 8, 49
Saari, L. M., 49
Sanders, J. R., 4, 5, 11, 39, 119
Santos, S., 275, 277
SAT (Scholastic Assessment Test), 183
Schedule/work breakdown structure, 262
SCM (success case model)
application example of, 79–80
introduction to, 42, 75–77
process of, 77–78
strengths and weaknesses of, 78
See also Brinkerhoff, R.
Scope of work, 260–261
Scriven, M., 4, 5, 15, 19, 40, 82–83, 95, 118, 119, 162
Scriven’s consumer-oriented evaluation model, 40, 82
Scriven’s goal-free evaluation model, 5, 15, 41, 82, 162
SD (standard deviation), 206–208
Self-evaluation framework, 250–253
Semi-interquartile range (SIQR), 206
Service orientation standard, 125–126
Skinner, B. F., 8, 280
Skinner, W., 277
Slack, N., 277
Society
core values and ideals held by, 111–112
ends in context of, 22
evaluation questions in context of, 29
Socrates, 4
Soft data, 136
Sputnik, 5
Srivastva, S., 6
Stake, R. E., 5, 41, 75, 119, 139, 241
Stakeholders
clarifying responsibilities of, 235
core values and ideals held by, 111–112
definition of, 25
determining key decisions and objectives of, 86–91
ensuring evaluation buy-in by, 9–10
evaluation questions coming from, 87–88
identification of, 84–86, 123
pre- and postprogram results reported to, 54fig, 96
test performance comparison reported to, 51fig
Stake’s responsive/client-centered evaluation model, 5, 41
Standard deviation (SD), 206–208
Standards
accuracy, 127–129
context, 127–129
development of evaluation, 119–120
feasibility, 124–125
listing of program evaluation, 121r
propriety, 125–127
utility, 123–124
Standards for Evaluation of Educational Programs, Projects, and Materials
(Joint Committee), 120, 122
Stanley, J. C., 189
Statement of work
description of, 261
sample and example of, 262–268
Statistics
descriptive, 200
inferential, 201, 214–217
measures of central tendency, 201–204
measures of dispersion (variability), 204–210fig
See also Measurement
Structured direct observations, 163
Structured discussion
analysis using, 1979
controls on, 198–199
imposing structure on emerging issues of, 197–198
relevance of, 198
Structured discussion
analysis using, 1979
controls on, 198–199
imposing structure on emerging issues of, 197–198
relevance of, 198
Stufflebeam, D., 5, 6, 18, 19, 39, 40, 41, 42, 43, 44, 107, 108, 109, 111, 112, 118–119, 120, 185
See also CIPP model
Summative evaluations
CIPP model applicability to, 110r
described, 15, 17, 18–20
“Surplus meaning” problem, 164
Surveys. See Questionnaires/surveys
Suwignjo, P., 276
System mapping errors
error of causal path, 240–241
error of local value, 241–242
error of misattribution, 241
error of the missing player, 241
Index

Technos: Quarterly for Education and Technology (2000), 160
Test-retest method, 184
Testing
criterion-referenced, 180–182
data collection through, 179–182
instructor-made for training, 179–180
norm-referenced, 182
reliability and validity of, 182–184
Time-and-material contract, 259–260
Time-series studies
four design variations of, 189
overview of, 188–189
simulations and games, 189–190
Treatment-centered methods, 184–186
Turner, T., 276
TVC (Visionary Corporation) evaluation case
background information on, 97–98
findings of, 101–104
methodology used in, 98–99, 101
relevant performance indicators, 100r
Tyler, R., 4, 40, 41
Tyler’s objective-based evaluation model, 40
Unobtrusive direct observations, 162–163
Usability testing, definition of, 20
Utility standards
evaluation impact, 124
feasibility, 124
information scope and collection, 123–124
stakeholder identification, 123
values identification, 124
Utilization-focused evaluation model, 42
Utilization-Focused Evaluation (Patton), 42
Valid data, 135
Valid information standard, 127–128
Validity
criterion-referenced test, 180–181
data, 135–137
standard for information, 127–128
testing, 182–184
Value	error of local, 241–242
identification standard for identifying, 124
Value added
definition of, 26
organizational vision on, 89–90
Variability. See Measures of dispersion
(variability)
Vision
definition of, 34
Kaufman’s ideal, 112
value-added, 89–90
Vocational rehabilitation measurable indicators,
148–151
Voss, C., 142
Wagner, R., 57
Waterman, R. H., 161
Watkins, R., 86, 88
Webster, W. J., 18, 19, 43
Weiss, C., 5
Western Michigan University’s Evaluation Center, 119
Willis, M., 20
Wishful thinking error, 243
Witkin, B. R., 93
Work products, 192
Worley, C. G., 254
Worth, 108
Worthen, B. R., 4, 5, 39, 119
Written reports
information included in, 229–230
outline for formal, 230–231
outline for “quick-and-dirty,” 231–232
Zimmerle, D. M., 49