

TABLE OF CONTENTS

English Preface	v
Japanese Preface	vii
Background to This Book	ix
Part I: Second Language Testing.	
Section A: Testing Strategies	1
1. Resources Available in Language Testing	3
2. Solutions to Problems Teachers Have with Classroom Testing	9
3. Differences in How Norm-Referenced and Criterion-Referenced Tests Are Developed and Validated	19
4. What Is Construct Validity?	27
5. What is Two-Stage Testing?	33
6. Testing Intercultural Pragmatics Ability	37
7. Test-Taker Motivations	45
8. Extraneous Variables and the Washback Effect	51
9. University Entrance Examinations: Strategies for Creating Positive Washback on English Language Teaching in Japan	57
Section B: Item Analyses	63
10. Norm-Referenced Item Analysis: Item Facility and Item Discrimination	65
11. Criterion-Referenced Item Analysis: The Difference Index and B-Index	71
12. Point-Biserial Correlation Coefficients	75
13. Distractor Efficiency Analysis in a Spreadsheet	83
14. How Can We Calculate Item Statistics for Weighted Items?	91
15. What Issues Affect Likert Item Questionnaire Formats?	95
16. Likert Items and Scales of Measurement?	99
Section C: Reliability Issues	105
17. The Cronbach Alpha Reliability Estimate	107
18. Cloze Tests and Optimum Test Length	111
19. Standard Error Versus Standard Error of Measurement	117

20. Can We Use the Spearman-Brown Prophecy Formula to Defend Low Reliability?	125
21. Generalizability and Decision Studies	131
22. How Do We Calculate Rater/Coder Agreement and Cohen's Kappa?	139
23. Reliability of Surveys.....	149
Part II: Second Language Research	
Section D: Planning Research	155
24. Characteristics of Sound Qualitative Research	157
25. Characteristics of Sound Quantitative Research	161
26. Characteristics of Sound Mixed Methods Research.....	167
Part II: Second Language Research	
Section E: Interpreting Research	171
27. What Do Distributions, Assumptions, Significance vs. Meaningfulness, Multiple Statistical Tests, Causality, and Null Results Have in Common?.....	173
28. Generalizability from Second Language Research Samples	181
29. Sample Size and Power.....	187
30. Sample Size and Statistical Precision.....	195
31. Skewness and Kurtosis.....	199
32. Effect Size and Eta Squared.....	205
33. Confidence Intervals, Limits, and Levels?	213
34. The Bonferroni Adjustment	221
Section F: Research Analyses	229
35. The Coefficient of Determination	231
36. Principal Components Analysis and Exploratory Factor Analysis: Definitions, Differences, and Choices.....	237
37. Choosing the Right Number of Components or Factors in PCA and EFA.....	245
38. Choosing the Right Type of Rotation in PCA and EFA.....	257
39. How are PCA and EFA Used in Language Research?	265
40. How Are PCA and EFA Used in Language Test and Questionnaire Development?	271
41. Chi Square and Related Statistics for 2 X 2 Contingency Tables.....	281
Cross Reference to Original Statistics Corner Columns	291
References.....	293