

· 青 · 年 · 学 · 者 · 文 · 库 ·

赵中宝 著

大学英语口语诊断性测试的  
开发和效度研究



*Development and Validation of the Diagnostic College English Speaking Test*



國防工业出版社

National Defense Industry Press

青年学者文库

浙江工商大学浙江省英语语言学文学重点学科资助出版

# 大学英语口语诊断性测试 的开发和效度研究

Development and Validation of the  
Diagnostic College English Speaking Test

赵中宝 著



国防工业出版社

·北京·

## 内容简介

本书系统全面地介绍了大学英语口语诊断性测试的开发和效度论证,调查了该考试所提供的诊断性反馈信息对大学英语教师教学与学生学习的影响,探讨了中国大学英语教学环境中应用诊断性考试的可行性和有效性。

本书适合外语专业的本科生、研究生和从事口语教学的教师参考使用。

### 图书在版编目(CIP)数据

大学英语口语诊断性测试的开发和效度研究/赵中宝著.  
—北京:国防工业出版社, 2013.5  
(青年学者文库)  
ISBN 978-7-118-08870-0

I. ①大… II. ①赵… III. ①英语—口语—教学  
研究—高等学校 IV. ①H319.9

中国版本图书馆 CIP 数据核字(2013)第 107715 号

※

国防工业出版社出版发行

(北京市海淀区紫竹院南路 23 号 邮政编码 100048)

国防工业出版社印刷厂印刷

新华书店经售

\*

开本 880×1230 1/32 印张 10<sup>5/8</sup> 字数 330 千字

2013 年 5 月第 1 版第 1 次印刷 印数 1—1000 册 定价 36.00 元

---

(本书如有印装错误,我社负责调换)

国防书店: (010)88540777

发行邮购: (010)88540776

发行传真: (010)88540755

发行业务: (010)88540717

## 前　　言

诊断性测试可以为教师和学生提供及时的反馈信息,帮助教师诊断学生的需求并调整相应的教学方案,有助于推进课堂多元化评估的构建;同时也帮助学生认识自己的学习,促进学生的自主学习能力。很多关于语言测试的著作对诊断性测试的定义和用途都有所介绍,但是对诊断性考试的开发和效度进行深入探讨的研究还较为欠缺。鉴于诊断性考试理论与实证研究的相对缺乏,我们需要开展更多的研究以进一步了解诊断性考试的特征及其所提供的诊断性反馈信息对教师教学和学生学习的影响。

本书是基于作者博士论文开展的诊断性测试研究,比较系统全面地介绍了大学英语口语诊断性测试的开发和效度论证,调查了该考试所提供的诊断性反馈信息对大学英语教与学的影响,探讨了中国大学英语教学环境中应用诊断性考试的可行性及有效性。全书共 6 章:第 1 章主要介绍了本书的研究目的、研究问题、研究意义及全书结构;第 2 章围绕诊断性测试、测试开发与效度研究等方面展开了全面的文献回顾;第 3 章基于交际语言能力模型、口语行为模型、测试开发的原则与指导方针等理论作者提出了大学英语口语诊断性测试开发的流程框架;第 4 章重点介绍了大学英语口语诊断性测试的开发、试测以及所有相关的实验设计和数据采集;第 5 章围绕大学英语口语诊断性测试的信度和效度,作者通过定性和定量分析相结合的方法从多方面详细论证了大学英语口语诊断性测试的信度和效度,并探讨了该考试所提供的诊断性反馈信息对英语口语教与学的影响;第 6 章总结了本研

究的主要发现,讨论了本研究的不足之处并指出了未来的研究方向。

本书的出版得到了浙江工商大学外国语学院院长刘法公教授和学院各位领导的关心与大力支持,在此,向他们表示衷心的感谢。此外,也要特别感谢我的导师上海交通大学外国语学院金艳教授一直以来的悉心指导和关怀。本书的出版也得到了国防工业出版社的支持与帮助,在此一并表示感谢。

限于作者的水平,本书如有错误或不妥之处,恳请读者批评指正。

赵中宝

2013年1月于杭州

## **List of Abbreviations**

|         |   |
|---------|---|
| ACTFL   | American Council on the Teaching of Foreign Languages   |
| ALTE    | the Association of Language Testers in Europe           |
| CDA     | the Cognitive Diagnostic Assessment                     |
| CEFR    | the Common Europe Framework of References for languages |
| CET-4   | College English Test Band 4                             |
| CET-6   | College English Test Band 6                             |
| CET-SET | College English Test-spoken English Test                |
| CG      | the Control Group                                       |
| CLA     | Communicative Language Ability                          |
| CO      | Coherence   |
| CRT     | Criterion-referenced Testing                            |
| CS      | Communicative Strategy                                  |
| DCEST   | Diagnostic College English Speaking Test                |
| DS      | Discourse Size  |
| EFL     | English as a Foreign Language                           |
| EG      | the Experiment Group                                    |
| FL      | Fluency   |
| FSI     | Foreign Service Institute                               |
| GA      | Grammatical Accuracy                                    |
| GC      | Grammatical Complexity                                  |

|       |  |
|-------|--|
| IN    | Intonation                                       |
| IP    | Individual Presentation                          |
| NRT   | Norm-referenced Testing                          |
| OEPC  | Oral English Proficiency Checklist               |
| OET   | Occupational English Test                        |
| OPI   | Oral Proficiency Interviews                      |
| PCA   | the Principal Component Analysis                 |
| PTE   | Pearson Test of English                          |
| PR    | Pronunciation                                    |
| RA    | Reading Aloud                                    |
| RP    | Role Play  |
| SAC   | the Self-assessment Checklist                    |
| SI    | Student Interview                                |
| SQ    | Student Questionnaire                            |
| SQFE  | the Student Questionnaire of Feedback Evaluation |
| SQTE  | the Student Questionnaire of Test Evaluation     |
| TEEP  | Test of English for Educational Purposes         |
| TI    | Teacher Interview                                |
| TK    | Turn-taking                                      |
| TOEFL | the Test of English as a Foreign Language        |
| TQ    | Teacher Questionnaire                            |
| TR    | Teacher's Rating                                 |
| TSE   | the Test of Spoken English                       |
| VA    | Vocabulary Accuracy                              |
| VR    | Vocabulary Range                                 |
| VSPT  | the Vocabulary Size Placement Test               |

## **List of Figures**

|              |   |     |
|--------------|---|-----|
| Figure 3. 1  | Components of communicative language ability in communicative language use .....    | 42  |
| Figure 3. 2  | Components of language use and language test performance .....                      | 46  |
| Figure 3. 3  | A summary of oral skills .....  | 48  |
| Figure 3. 4  | Speech production model .....   | 52  |
| Figure 3. 5  | A framework of test development .....   | 58  |
| Figure 3. 6  | Modular specifications .....  | 64  |
| Figure 3. 7  | A conceptual framework for performance testing .....                                | 68  |
| Figure 3. 8  | Proficiency and its relationship to performance .....                               | 70  |
| Figure 3. 9  | Model of oral test performance .....  | 72  |
| Figure 3. 10 | An expanded model of speaking test performance .....                                | 74  |
| Figure 3. 11 | A preliminary framework for the development and validation of the DCEST .....       | 76  |
| Figure 5. 1  | Scree plot of the principal factor analysis .....                                   | 134 |
| Figure 5. 2  | Mean scores of the experiment group on DCEST 1 to 7 .....                           | 152 |
| Figure 5. 3  | A procedural framework for the development and validation of diagnostic tests ..... | 176 |

## List of Tables

|             |  |    |
|-------------|--|----|
| Table 3. 1  | Components of the construct to be measured<br>in the DCEST and corresponding knowledge<br>and skills ..... | 56 |
| Table 4. 1  | The structure and content of TQ .....  | 80 |
| Table 4. 2  | The structure and content of SQ .....  | 80 |
| Table 4. 3  | Descriptive statistics of oral English<br>proficiency .....  | 82 |
| Table 4. 4  | Students' evaluation of their linguistic<br>skills and knowledge .....                                     | 83 |
| Table 4. 5  | A comparison of teachers' and students'<br>evaluation of learning difficulties .....                       | 84 |
| Table 4. 6  | Causes of learning difficulties in<br>oral English .....   | 84 |
| Table 4. 7  | Students' motivation of improving oral<br>English proficiency .....  | 85 |
| Table 4. 8  | Ways of oral English learning as reported<br>by the students .....   | 86 |
| Table 4. 9  | Tasks used by teachers in oral English<br>classroom .....  | 87 |
| Table 4. 10 | Test tasks used by teachers in<br>classroom assessment of oral English .....                               | 88 |
| Table 4. 11 | Rating criteria used by teachers .....   | 88 |

|             |   |     |
|-------------|---|-----|
| Table 4. 12 | Test tasks and linguistic functions and skills to be measured .....                                 | 94  |
| Table 4. 13 | Structure and time allotment of DCEST A and DCEST B .....   | 101 |
| Table 4. 14 | Rating criteria of some renowned oral English tests .....   | 104 |
| Table 4. 15 | Correlations between DCEST scores, students' self-assessment and teacher's ratings (N=22) .....     | 115 |
| Table 4. 16 | Participants involved in the main study .....   | 119 |
| Table 4. 17 | Research instruments for the main study .....   | 120 |
| Table 4. 18 | Stages and types of data collected in the main study .....  | 123 |
| Table 5. 1  | Intra-rater and inter-rater reliability indices of the DCEST (N=14) .....                           | 128 |
| Table 5. 2  | Parallel form reliability indices of the DCEST (N=14) .....   | 128 |
| Table 5. 3  | Correlations between the analytic rating criteria and three test tasks .....                        | 132 |
| Table 5. 4  | Total variance explained by the components .....  | 135 |
| Table 5. 5  | Rotated Component Matrix .....  | 136 |
| Table 5. 6  | Correlations between DCEST 1 test scores, students' self-assessment and the teacher's ratings ..... | 143 |
| Table 5. 7  | Means and SDs of DCEST 1, self assessment and teacher's ratings .....                               | 143 |
| Table 5. 8  | Descriptive statistics of responses to  |     |

|  |     |
|--|-----|
| the SQTE .....   | 144 |
| Table 5.9 Means and SDs of CG1 and EG1,<br>CG 2 and EG2 .....  | 149 |
| Table 5.10 Independent Samples t-test for<br>CG1 and EG1, CG2 and EG2 .....  | 149 |
| Table 5.11 Paired Samples t-test for EG1 and<br>EG2, CG1 and CG2 .....   | 150 |
| Table 5.12 Analytic mean scores of the experiment<br>group in DCEST 1 to 7 .....   | 151 |
| Table 5.13 Means and SDs of seven DCEST test<br>scores of the experiment group .....   | 152 |
| Table 5.14 Three proficiency subgroups in<br>the experiment group .....  | 153 |
| Table 5.15 Descriptive statistics of responses<br>to SQFE .....  | 154 |
| Table 5.16 Means and SDs of the usefulness of<br>analytic feedback parameters .....  | 156 |
| Table 5.17 Descriptive statistics of the three<br>proficiency subgroups' overall evaluation<br>of the usefulness of feedback ..... | 157 |
| Table 5.18 The three proficiency subgroups' evaluation<br>of the usefulness of each feedback<br>parameter .....                    | 157 |
| Table 5.19 Student A's and B's scores<br>in DCEST 1-7 .....  | 162 |
| Table 5.20 Number of errors and good performances<br>in Student A's and B's transcripts .....                                      | 164 |

# **CONTENTS**

|   |    |
|---|----|
| <b>Chapter 1 Introduction .....</b>                                 | 1  |
| 1. 1 Rationale for the Study .....                                  | 1  |
| 1. 2 The Aim and Objectives of the Study .....                      | 5  |
| 1. 3 Research Questions .....                                       | 6  |
| 1. 4 Significance of the Present Study .....                        | 7  |
| 1. 5 Structure of the Book .....                                    | 8  |
| <b>Chapter 2 Literature Review .....</b>                            | 10 |
| 2. 1 Assessment for Learning .....                                  | 10 |
| 2. 1. 1 Assessment for Learning and<br>Assessment of Learning ..... | 10 |
| 2. 1. 2 Formative Assessment and Summative<br>Assessment .....      | 14 |
| 2. 1. 3 Norm-referenced and Criterion-referenced<br>Testing .....   | 17 |
| 2. 2 Diagnostic Testing .....                                       | 19 |
| 2. 2. 1 Definitions of a Diagnostic Test .....                      | 20 |
| 2. 2. 2 Characteristics of Diagnostic Tests .....                   | 23 |
| 2. 2. 3 Studies on Diagnostic Language<br>Tests .....               | 24 |
| 2. 3 Studies on Speaking Tasks .....                                | 30 |
| 2. 4 Validation Studies of Language Tests .....                     | 33 |
| 2. 5 Summary .....  | 37 |

|   |    |
|---|----|
| <b>Chapter 3 A Conceptual Framework for the Development and Validation of the DCEST .....</b> | 39 |
| 3. 1 Communicative Language Ability and the Construct of Speaking .....                       | 40 |
| 3. 1. 1 Models of Communicative Language Ability .....  | 40 |
| 3. 1. 2 Models of Speech Production .....   | 46 |
| 3. 1. 3 Frameworks for Defining the Construct of Speaking .....                               | 53 |
| 3. 2 Guidelines and Procedures of Test Development .....                                      | 57 |
| 3. 3 Defining Test Specifications for a Speaking Test .....                                   | 62 |
| 3. 4 Models of Speaking Performance .....   | 66 |
| 3. 4. 1 Milanovic and Saville's Model .....   | 67 |
| 3. 4. 2 McNamara's Model .....  | 69 |
| 3. 4. 3 Skehan's Model .....  | 70 |
| 3. 4. 4 Fulcher's Model .....   | 72 |
| 3. 5 Summary .....  | 77 |
| <b>Chapter 4 Research Design and Methodology .....</b>  | 78 |
| 4. 1 Needs Analysis .....   | 78 |
| 4. 1. 1 Design of the Questionnaires .....  | 79 |
| 4. 1. 2 Participants of the Questionnaire Survey .....  | 81 |
| 4. 1. 3 Results of the Survey .....   | 81 |
| 4. 1. 4 Implications for the DCEST .....  | 89 |
| 4. 2 The Development of the Prototype DCEST .....   | 90 |
| 4. 2. 1 Defining the Construct .....  | 90 |

|                  |   |     |
|------------------|---|-----|
| 4.2.2            | Selection of Speaking Test Tasks .....                                  | 93  |
| 4.2.3            | Rating Criteria .....   | 102 |
| 4.2.4            | Feedback Descriptors .....  | 110 |
| 4.3              | The Pilot Study .....   | 111 |
| 4.3.1            | Participants .....  | 113 |
| 4.3.2            | Implementation of the Pilot Study .....                                 | 113 |
| 4.3.3            | Results of the Pilot Study .....  | 114 |
| 4.3.4            | Implications for the Main Study .....                                   | 117 |
| 4.4              | The Main Study .....  | 118 |
| 4.4.1            | Participants .....  | 118 |
| 4.4.2            | Research Instruments .....  | 119 |
| 4.4.3            | Procedure of Data Collection in the<br>Main Study .....                 | 121 |
| <b>Chapter 5</b> | <b>Results and Discussions</b> .....                                    | 125 |
| 5.1              | Test Reliability .....  | 125 |
| 5.1.1            | Intra-rater Reliability .....   | 126 |
| 5.1.2            | Inter-rater Reliability .....   | 127 |
| 5.1.3            | Parallel Form Reliability .....   | 128 |
| 5.2              | Test Validity .....   | 129 |
| 5.2.1            | Construct Validity .....  | 130 |
| 5.2.2            | Content Validity .....  | 137 |
| 5.2.3            | Criterion-related Validity .....  | 141 |
| 5.2.4            | Face Validity .....   | 144 |
| 5.2.5            | Consequential Validity .....  | 147 |
| 5.3              | A Procedural Framework for the<br>Development of Diagnostic Tests ..... | 174 |
| 5.3.1            | Phase 1: Needs Analysis .....   | 175 |
| 5.3.2            | Phase 2: Test Design and  |     |

|  |            |
|--|------------|
| Operationalization .....   | 177        |
| 5. 3. 3 Phase 3: Test Piloting, Administration<br>and Validation ..... | 180        |
| 5. 3. 4 Phase 4: Test Impact .....                                     | 181        |
| 5. 4 Summary .....   | 182        |
| <b>Chapter 6 Conclusions .....</b>                                     | <b>185</b> |
| 6. 1 Major Findings .....  | 185        |
| 6. 2 Implications of the Present Study .....                           | 192        |
| 6. 3 Limitations and Suggestions .....                                 | 193        |
| 6. 4 Concluding Remarks .....  | 196        |
| <b>Appendices .....</b>  | <b>198</b> |
| Appendix 1 Test Specifications of the DCEST .....                      | 198        |
| Appendix 2 Teacher Questionnaire .....                                 | 206        |
| Appendix 3 Student Questionnaire .....                                 | 209        |
| Appendix 4 Diagnostic College English<br>Speaking Test A .....         | 213        |
| Appendix 5 Diagnostic College English<br>Speaking Test B .....         | 219        |
| Appendix 6 Analytical Rating Criteria<br>for DCEST .....               | 224        |
| Appendix 7 Feedback Descriptors<br>for DCEST .....                     | 226        |
| Appendix 8 Rater's Mark Sheet of DCEST<br>A and B .....                | 229        |
| Appendix 9 Oral English Proficiency Checklist .....                    | 231        |
| Appendix 10 Student's Self-assessment Checklist .....                  | 232        |
| Appendix 11 Test Manual of DCEST A and B .....                         | 233        |
| Appendix 12 Student Questionnaire of Test .....                        |            |

|             |   |     |
|-------------|---|-----|
|             | Evaluation A and B .....                                  | 238 |
| Appendix 13 | Interview Questions for<br>Teachers and Students .....    | 243 |
| Appendix 14 | Revised Analytical Rating<br>Criteria for DCEST .....     | 244 |
| Appendix 15 | Revised Feedback Descriptors<br>for DCEST .....           | 247 |
| Appendix 16 | Revised Rater's Mark Sheet<br>for DCEST .....             | 251 |
| Appendix 17 | Revised Oral English Proficiency<br>Checklist .....       | 252 |
| Appendix 18 | Revised Student's Self-assessment<br>Checklist .....      | 253 |
| Appendix 19 | Revised Test Manual of DCEST .....                        | 254 |
| Appendix 20 | Revised Student Questionnaire<br>of Test Evaluation ..... | 256 |
| Appendix 21 | Dcest 1 Test Paper<br>(Pre-test and Post-test).....       | 259 |
| Appendix 22 | Dcest 2 Test Paper .....                                  | 265 |
| Appendix 23 | Dcest 3 Test Paper .....                                  | 269 |
| Appendix 24 | Dcest 4 Test Paper .....                                  | 273 |
| Appendix 25 | Dcest 5 Test Paper .....                                  | 277 |
| Appendix 26 | Dcest 6 Test Paper .....                                  | 281 |
| Appendix 27 | Student Questionnaire of Feedback<br>Evaluation .....     | 285 |
| Appendix 28 | Descriptive of EG'S DCEST 1-7<br>Total Scores .....       | 287 |
| Appendix 29 | Descriptive of EG'S DCEST 1                               |     |

|                     |   |     |
|---------------------|---|-----|
|                     | Analytical Scores .....                                       | 288 |
| Appendix 30         | Descriptive of EG'S DCEST 2<br>Analytical Scores .....        | 289 |
| Appendix 31         | Descriptive of EG'S DCEST 3<br>Analytical Scores .....        | 290 |
| Appendix 32         | Descriptive of EG'S DCEST 4<br>Analytical Scores .....        | 291 |
| Appendix 33         | Descriptive of EG'S DCEST 5<br>Analytical Scores .....        | 292 |
| Appendix 34         | Descriptive of EG'S DCEST 6<br>Analytical Scores .....        | 293 |
| Appendix 35         | Descriptive of EG'S DCEST 7<br>Analytical Scores .....        | 294 |
| Appendix 36         | Descriptive of CG'S CDEST 1 and<br>Dcest 7 Total Scores ..... | 295 |
| Appendix 37         | Descriptive of CG'S DCEST 1<br>Analytical Scores .....        | 296 |
| Appendix 38         | Descriptive of CG'S Dcest 7<br>Analytical Scores .....        | 297 |
| Appendix 39         | Descriptive Statistics of SQTE .....                          | 298 |
| Appendix 40         | Descriptive Statistics of SQFE .....                          | 299 |
| Appendix 41         | Sample of Student Interview .....                             | 300 |
| Appendix 42         | Coded Transcripts of Student A<br>and B .....                 | 303 |
| Appendix 43         | Sample of Teacher Interview .....                             | 311 |
| <b>Bibliography</b> | .....   | 312 |