Studies in Language Testing

Fairness and validation in language assessment

Selected papers from the 19th Language **Testing Research** Colloquium, Orlando, Florida

Edited by Antony John Kunnan

Series Editor Michael Milanovic



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> Fairness and validation in language assessment: Selected papers from the 19th Language Testing Research Colloquium, Orlando, Florida

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California State University, Los Angeles

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1. Education. Assessment 2. Education. Tests. Setting

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Series Editor's note

This volume is included in the Studies in Language Testing series because it represents an important statement in the on-going discussion on fairness in language testing. Fairness and its natural relationship with language test validation has been a key feature of debate in the field for the last decade. We have seen a broadening of views away from a relatively narrow focus on reliability and validity, to one, which recognises a complex set of relationships. Concern about this rich interaction has long been a tradition in many European language examinations. Indeed, I remember, at the time of the Cambridge-TOEFL comparability study, which took place in the late eighties, John Reddaway, secretary of the University of Cambridge Local Examinations Syndicate (UCLES) at the time, used the term 'felt fair' about Cambridge examinations in general and EFL ones in particular. Many of us did not realise how important this concept was until much later. Feeling something is fair may not be the same as it being fair but it is, perhaps, a necessary prerequisite.

Throughout the nineties, UCLES has continued the process of making its EFL examinations and tests as fair as possible. Much care and attention has gone into the materials that appear in tests. Language and topics are scrutinised, item writers and examiners carefully trained and extensive systems for monitoring quality have been enhanced. Test materials are fully pretested and examinations constructed which balance testing focus and content in accordance with published specifications. Extensive support materials are provided for candidates and training programmes for teachers. Much effort goes into developing customised test papers and procedures for candidates who are not able to deal with the conventional papers. Special circumstances, which may have disadvantaged candidates, are reported and investigated. The examination centre network is being extended continuously with about 3,000 centres where candidates can take a Cambridge EFL examination now operating throughout the world. Principles underlying performance have been investigated and instruments developed to try and understand the relationships. Much work has gone into developing and validating user-oriented scales to improve test users' understanding of language levels and what examination scores mean in terms of performance. Many dimensions of the direct assessment of speaking and writing have been

investigated and documented. Investigations into the impact of examinations have been carried out and instrumentation developed which is being shared with researchers around the world.

Given the importance of fairness and validation to the field, UCLES is pleased to add this title, edited with great care and commitment by Antony Kunnan, to the series.

> Michael Milanovic Cambridge December 1999

Preface

Fairness of language tests and testing practices has always been a concern among test developers, test users and test researchers and the traditional manner of ensuring fairness has been through investigations of the tests' reliability and validity. However, in the past decade educational and language assessment researchers have begun to focus directly on fairness and related matters such as test standards, test bias, equity and ethics for testing professionals.

The 19th annual Language Testing Research Colloquium which was held on March 6–9 1997 in Orlando, Florida, USA, brought this overall concern to sharp focus by having 'Fairness in Language Testing' as its theme. The conference presentations and discussions attempted to understand the concept of fairness, define the scope of the concept and connect it with the concept of validation of test score interpretation. The different presentation formats provided ample opportunities for the participants to meet and discuss these and other relevant matters.

The plenary address entitled 'A "post-modern" view of the problem of assessment or Why do I get such a headache thinking about test design?' was given by Henry Braun, Vice President for Research Management, Educational Testing Service, Princeton. This was followed by a panel discussion on the theme of the conference by Lyle Bachman, Liz Hamp-Lyons, Bonny Norton, Elana Shohamy and Antony John Kunnan, who together laid out some of the critical issues that are relevant to the concept.

Two invited speakers, William Grabe from Northern Arizona University and John Swales from the University of Michigan, also gave addresses. Grabe spoke on 'Reading research, the development of reading abilities and reading assessment' and Swales on 'English triumphant, ESL leadership and issues of fairness'.

There were two pre-colloquium workshops featuring Lyle Bachman and Adrian Palmer on 'An approach to the design and development of language test tasks' and Fred Davidson on 'Statistical data handling: A principled process'. The two colloquia during the LTRC were 'Computers and language testing: Evaluating access and equity' organized by Carol Taylor and 'Examining test taker characteristics and second language test performance using a structural equation modeling approach' organized by James Purpura.

In addition, over the three days, over 40 presentations in the form of

papers, works in progress, and posters were made and approximately 140 people attended the Colloquium. A closing panel discussion by Mary Spaan, Caroline Clapham, Brian Lynch and Randy Thrasher on the themes of the papers concluded the presentations. A listing of all invited addresses, colloquia and presentations is given after this preface.

This volume presents selected papers from the Colloquium. It is organized in four sections: Section One presents short articles by six language assessment specialists who were invited to discuss the notion of fairness in language assessment. The articles by Antony John Kunnan, Elana Shohamy, Bonny Norton, Liz Hamp-Lyons, Mary Spaan and Lyle Bachman help develop the concept of fairness and outline its context and limitations through argument, illustrations, examples and personal reflection.

Section Two focuses on three concerns of fairness: test standards, criteria and test bias. The four papers by Peter Lowenberg, Dan Douglas and Ron Myers, Catherine Elder, and Yong-Won Lee examine the assumptions regarding test standards and criteria and examine ways by which test bias can be investigated and understood.

Section Three focuses on validation matters as a way of ensuring fairness. The four papers by Alfred Appiah Sakyi, Beryl Meiron and Laurie Schick, Charles Stansfield *et al.*, and Ebrahim Khodadady and Michael Herriman deal with ways in which validation of test score interpretation can be enhanced by examining ratings and rater background and test development theory and practice.

In the final section, Section Four, William Grabe presents a current view of reading comprehension and the implications and dilemmas for second language reading assessment. This volume concludes with Henry Braun's futuristic vision of an ecological approach to test design in which consultations among various constituencies such as clients, customers, academe and industry will help build a better model for test design, development and delivery.

I hope the papers in this volume collectively offer a fine first introduction to fairness and validation in the field of language assessment. I hope these papers will lead to presentations, discussions and debates in the field so that a full understanding of what constitutes fairness, and how it can be enhanced and ensured in tests and testing practice emerges soon.

In editing this volume I have acquired a few debts. Some of these I would like to acknowledge here. I am indebted to the authors of the papers who were all patient with changes and adjustments I suggested, and to Alister Cumming and Glen Fulcher for providing valuable reviews of all the papers. I also want to thank my graduate assistant Yutaka Kawamoto at CSULA and Paulo Pinto da Cunha at UCLES for editorial assistance in the preparation of the final manuscript. I am also grateful to my language testing colleagues Lyle

Bachman and Mary Spaan, (co-chair) who helped me organize the Colloquium that gave birth to this volume and to Mike Milanovic for accepting my proposal for this volume. Without the goodwill of all these good people I would never have been able to bring this volume to you.

Antony John Kunnan San Gabriel, California March, 1999

List of all 19th LTRC invited addresses, colloquia and panel discussions, papers, works in progress and posters

Pre-Colloquium Workshops

- 1. Lyle Bachman and Adrian Palmer, An Approach to the Design and Development of Language Test Tasks
- 2. Fred Davidson, Statistical Data Handling: A Principled Process

Plenary Address:

Henry Braun, A 'Post-modern' View of the Problem of Assessment or Why Do I Get Such a Headache Thinking About Test Design?

Invited Speakers

- 1. William Grabe, *Reading Research, the Development of Reading Abilities, and Reading Assessment*
- 2. John Swales, English Triumphant, ESL Leadership and Issues of Fairness

Colloquia

- 1. Carol Taylor (Organizer), Irwin Kirsch, Joan Jamieson, Dan Eignor (Presenters), Charles Alderson, William Grabe (Discussants), *Computers and Language Testing: Evaluating Access and Equity*
- 2. James Purpura (Organizer), Antony John Kunnan, Geoff Brindley and Steve Ross (Presenters), *Examining Test Taker Characteristics and Second Language Test Performance using a Structural Equation Modeling Approach*

Panel Discussions

- 1. **Opening Panel:** Antony John Kunnan (Organizer), Lyle Bachman, Liz Hamp-Lyons, Bonny Norton, Elana Shohamy (Discussants), *Fairness in Language Testing*
- 2. Closing Panel: Mary Spaan (Organizer), Caroline Clapham, Brian Lynch, Randy Thrasher (Discussants), *Summary of Conference Themes*

Papers

- 1. Rosemary Baker, Assessment of language impairment across cultures
- 2. Gary Buck, Kumi Tatsuoka, C. Tatsuoka, Irene Kostin, *The effect of first language background on the cognitive and linguistic attributes underlying performance on the TOEIC*
- 3. Jeff Connor-Linton, Elana Shohamy, *Multidimensional analysis and oral proficiency sampling: Performance effects of task and elicitation context*
- 4. Alan Davies, Kathryn Hill, Questioning an early start the transition from primary to secondary foreign language learning
- 5. John de Jong, Fellyanka Stoyanova, *The relation between reliability and validity: An issue of fairness*
- 6. Hui-Chun (Angie) Liu, Constructing and validating parallel forms of performance-based writing prompts in academic settings
- 7. Catherine Elder, Is it fair to assess both NS and NNS on school 'foreign' language examinations?
- 8. H. Gary Cook, Investigating bias over time
- 9. Daniel Reed, Gene Halleck, *The relationship between interviewer style* and OPI ratings at three levels of proficiency
- 10. Constant Leung, Alex Teasdale, Raters' understanding of oral scales as abstracted concept and as instruments of decision making: A phenomenographic study
- 11. Swee-Heng Chan, *Methods of assessing and displaying salient features of coherence in ESL writing*
- 12. Jared Bernstein, Computer-based oral proficiency assessment: Field results
- 13. Noriko Iwashita, *The validity of the paired interview of format in oral performance testing*
- 14. Carol Moder, Gene Halleck, Balancing fairness and authenticity in performance test: An alternative rating approach for ITAs
- 15. Dan Douglas, Ron Myers, Assessing the communication skills of veterinary students: Whose criteria?
- 16. Peter Lowenberg, Non-native varieties and issues of fairness in testing English as a world language

Works in progress

- 1. Amma Kazuo, A multidimensional approach to learners' grammatical proficiency
- 2. Jayanti Banerjee, Establishing predictive validity: Methodological considerations
- 3. Samia Belyazid, Task-based language test specifications designed for an adult TEFL context in Morocco
- 4. Alejandro Brice, The bilingual classroom protocol: Its development and use

- 5. Yong-Won Lee, Differential testlet functioning in an EFL reading test
- 6. Lawrence Myles, *The interaction between a computer adaptive test and self assessment of second language ability*
- 7. Yuji Nakamura, Involving factors of fairness in language testing
- 8. Pavlov Pavlos, *Comparing native and non-native reactions to EFL speech samples*
- 9. Alfred Appiah Sakyi, Validation of holistic scoring for ESL writing assessment: A study of how raters evaluate ESL compositions on a holistic scale
- 10. Randy Thrasher, Toward understanding the nature of communicative competence: An attempt to make sense of think-aloud protocol data from reading test subjects
- 11. Timo Tormakangas, Vocabulary testing: The effect of method on test scores and grades
- 12. Weiping Wu, Greg Kamei, Dorry Kenyon, *The development and use of a computer-generated task bank for assessing oral proficiency*

Posters

- 1. Gary Buck, Kumi Tasuoka, C. Tasuoka, *The effects of coding reliability and the validity of theoretical assumptions on the Rule Space procedure*
- 2. Vivien Berry, Gender and personality as factors of interlocutor variability in oral performance tests
- 3. Alan Davies, Catherine Elder, *Language distance as a factor in ESL test performance*
- 4. Rudiger Grotjahn, Christine Klein-Braley, Avoiding bias in C-test construction and C-test
- 5. Gene Halleck, Creating an ESL VOCI: From script-writing to field testing
- 6. Fellyanka Kaftandjieva, Sauli Takala, Men are from Mars, Women are from Venus: The case of an English vocabulary test
- 7. Sunwoo Kang, Effects of native language and learning experience on the University of Illinois placement test
- 8. Gholam Reza Kiani, *Extroversion and pedagogical setting as sources of variation in performance in English proficiency tests*
- 9. Rama Mathew, Washback of tests on teaching: Is it fair to students?
- 10. Beryl Meiron, Mary-Erin Crook, Yutaka Kawamoto, Laurie Schick, Carmen Velasco-Marin, *Ratings, raters, and test performance: An exploratory study*
- 11. Barry O'Sullivan, The interlocutor as a variable: Affective factors in language testing

- 12. Kyle Perkins, The effect of proficiency on item difficulty, reliability, reproducibility, and dimensionality in a second language reading comprehension
- 13. Charles Stansfield, Marijke van der Heide, A listening summary translation exam for southern Minnan
- 14. Ebrahim Khodadady and Michael Herriman, Schema theory and selected response item formats: From theory to practice

Section One Fairness: Concept and Context

Based on the opening and closing panels at the Colloquium, six language assessment specialists were invited to discuss the notion of fairness in language assessment. These short articles are slightly expanded versions of the oral presentations and discussions. Antony John Kunnan opens the discussion with the notion of fairness as social justice. Elana Shohamy examines fairness in the broader context of 'test use' by discussing three research studies based on test use in Israel. Bonny Norton examines the marking or scoring guidelines in three writing assessment contexts in South Africa, the US and Canada. Liz Hamp-Lyons focuses through personal reflection on fairness for test takers, which she argues is only one of the many kinds of fairness. Mary Spaan focuses on how test developers can enhance fairness through cooperation among test developers, test users and test takers. Lyle Bachman concludes this discussion by raising questions about the nature and extent of our responsibility for fairness.