Studies in Language Testing 26

Examining Writing

Research and practice in assessing second language writing

Stuart D Shaw &
Cyril J Weir

Series Editors
Michael Milanovic
and Cyril J Weir

UNIVERSITY *of* CAMBRIDGE
ESOL Examinations

CAMBRIDGE
UNIVERSITY PRESS

Examining Writing

Research and practice in assessing second language writing

Stuart D Shaw
Validation Officer
University of Cambridge ESOL Examinations

and

Cyril J Weir
Powdrill Professor in English Language Acquisition
University of Bedfordshire

CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

www.cambridge.org
Information on this title: www.cambridge.org/9780521692939

First published 2007

Printed in the United Kingdom at the University Press, Cambridge

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging in Publication Data
Shaw, Stuart D., 1962-
Examining writing : research and practice in assessing second language
writing / Stuart D. Shaw, Cyril J. Weir.
p. cm. – (Studies in language testing ; 26)
Includes bibliographical references and index.
ISBN 978-0-521-69293-9
1. Language and languages – Ability testing. 2. Rhetoric – Ability testing.
I. Weir, Cyril J. II. Title. III. Series.
P53.27.S53 2007
418′.0076 – dc22 2007016909

ISBN 978-0-521-69293-9

Series Editors' note

Cambridge ESOL has long experience of the direct assessment of second language writing ability going back to the introduction of the Cambridge Proficiency in English (CPE) examination almost a century ago. In 1913 CPE required test takers to complete a two-hour English Essay, a Writing task modelled on the traditional UK school/university-based assessments of the time. By 1938 the CPE Writing component had been renamed English Composition; it included a new summary Writing task alongside the established essay and the time allocation had increased to two and a half hours. When the Lower Certificate in English (later First Certificate – FCE) was introduced in 1939 it incorporated an English Composition and Language paper lasting two hours; candidates were provided with a choice of subjects for a free composition, such as a letter or an essay on a given subject.

Since then a direct test of second language writing (and of speaking) ability has been added to subsequent examinations developed by Cambridge as and when this has been appropriate. The examination board's commitment over many decades to direct performance assessment reflects a strong view (or construct) of proficiency as being about the *ability to use* language rather than simply *possess knowledge about* language. Individual examinations adopt an approach to assessing writing ability that is appropriate to the proficiency level, test purpose, context of use, and test-taking candidature for which they are designed; the approach shapes features such as choice of test format, task design, assessment criteria and rating descriptors. Today the Writing components in Cambridge ESOL examinations continue to be considered as useful measures of learners' ability to communicate in written English.

The credibility of any language examination is determined by the faithfulness with which it represents a coherent understanding and articulation of the underlying abilities or construct(s) that it seeks to measure. For example, if the construct of second language writing ability is not well defined and operationalised, then it will be difficult for examination developers to support claims they wish to make about the usefulness of their writing tests. This includes claims that the tests do not suffer from factors such as *construct under-representation* (i.e. the test is too narrow in focus and fails to include important elements of the construct of interest) or *construct irrelevant variance* (i.e. the test score is prone to systematic measurement error perhaps due to factors other than the construct of interest, such as background/cultural knowledge or unreliable scoring). Construct under-representation and construct irrelevant variance are widely regarded as the two most important threats to construct validity.

The need for clear construct definition becomes especially important when an examination developer offers writing tests at different proficiency levels (e.g. beginner, intermediate, advanced) since it presupposes a clear understanding of how the nature of second language writing ability changes across the proficiency continuum and how this can be operationalised in terms of differentiated task demands for writing tests targeted at different levels (e.g. KET, FCE, CPE).

This volume sets out to explicate the theoretical basis on which Cambridge ESOL currently tests different levels of second language writing ability across its range of test products, particularly those within its traditional Main Suite of general English examinations (KET–CPE) which span Levels A2–C2 of the Common European Framework of Reference. It does so by presenting an explicit validation framework for the testing of Writing. Building on Weir (2005), Shaw and Weir present a socio-cognitive framework which views language testing and validation within a contemporary evidence-based paradigm. They use this framework to conduct a comprehensive description and evaluation of Cambridge ESOL's current approach to examining the skill of second language writing according to a number of dimensions or parameters.

A comprehensive model of second language proficiency remains elusive in theoretical terms; nevertheless, international language proficiency test developers such as Cambridge ESOL need to have recourse to a well-informed and coherent language proficiency model in order to operationalise it for practical assessment purposes. Such a model needs to deal satisfactorily with the twin dimensions of: (1) aspects of cognition, i.e. the language user's or test taker's cognitive abilities; and (2) features of the language use context, i.e. task and situation, in the testing event and beyond the test. These two dimensions constitute two of the core components within the Cambridge ESOL view of construct definition. In the specific context of practical language testing/assessment, which is where the theoretical construct must be operationalised, there exists an important third dimension: (3) the process of marking/rating/scoring itself. In other words, at the heart of any language testing activity there is a triangular relationship between three critical components:

- the test-taker's cognitive abilities
- the context in which the task is performed, and
- the scoring process.

These three 'internal' dimensions of any language test – referred to in this volume as *cognitive validity, context validity* and *scoring validity* – constitute an innovative conceptualisation of construct validity, which has sound theoretical and direct practical relevance for language testers. By maintaining a strong focus on these three components and by undertaking a careful analysis of tests in relation to these three dimensions, it becomes possible to provide theoretical, logical and empirical evidence to support validity claims and arguments about the quality and usefulness of writing tests. Having a clear and well articulated position on the underlying construct(s) can also help guide writing test revision projects and inform any future modifications.

The symbiotic relationship between the contextual parameters laid out in the task and the cognitive processing involved in task performance is stressed throughout this volume. Language testers need to give both the socio and the cognitive elements an appropriate place and emphasis within the whole, and avoid privileging one over another. The framework reminds us that language use – and also language assessment – is both a socially situated and a cognitively processed phenomenon. The twin 'external' dimensions of a test which are discussed in this volume – *consequential validity* and *criterion-related validity* – also reflect this understanding of the nature of language assessment from a wider perspective. The socio-cognitive framework thus seeks to marry the individual psycholinguistic perspective with the individual and group sociolinguistic perspectives. It could be argued that the socio-cognitive approach helps promote a more 'person-oriented' than 'instrument-oriented' view of the testing/assessment process than earlier models/frameworks; it implies a strong focus on the language learner or test taker, rather than the test or measurement instrument, as being at the centre of the assessment process, and it acknowledges the extent to which that assessment process is itself part of a larger social endeavour. This humanistic tradition has been a fundamental feature of the Cambridge ESOL examinations since the earliest days.

From the Cambridge ESOL perspective, the socio-cognitive framework may be the first framework which allows for serious theoretical consideration of the issues and is at the same time capable of being applied practically – hence its relevance and value to an operational language testing context. Although other frameworks (e.g. Bachman 1990) have been extremely helpful in provoking language test practitioners to think about key issues from a theoretical perspective, they have often proved difficult to operationalise in a manageable and meaningful way in the context of large-scale, international language assessment such as that undertaken by Cambridge ESOL.

In terms of the contribution it makes to research and practice in examining second language writing, the socio-cognitive framework helps to clarify, both theoretically and practically, the various constituent parts of the testing endeavour as far as 'validity' is concerned. The validation process presented in this volume is conceptualised in a temporal frame thereby identifying the various types of validity evidence that need to be collected at each stage in the test development and post implementation cycle. Within each of these, individual criterial parameters that help distinguish between adjacent proficiency levels have been identified and are summarised at the end of each chapter.

The framework gives us all a valuable opportunity to revisit many of our traditional terms and concepts, to redefine them more clearly, and to grow in our understanding. It accommodates and strengthens Cambridge ESOL's existing Validity, Reliability, Impact and Practicality (VRIP) approach (see Saville in Weir and Milanovic 2003); while seeking to establish similar evidence, it also attempts to reconfigure validity to show how its constituent parts interact with one another. The results from developing and operationalising the framework in this volume with regard to testing writing ability in the Main Suite examinations are encouraging, and evidence to date suggests that where it has been applied to other Cambridge examinations/tests it has proved useful in generating validity evidence in those cases too, e.g. in the International Legal English Certificate, The Teaching Knowledge Test, and BEC and BULATS (see O'Sullivan 2006). As well as showing where current examinations are performing satisfactorily in respect of a particular validity parameter, areas for possible improvement are highlighted, constituting a future research agenda in Writing not only for Cambridge ESOL but potentially for the wider research community.

It would be illuminating for other examination boards offering English language tests at a variety of proficiency levels to compare their own exams in terms of the validity parameters mapped out in this volume. In this way the nature of language proficiency across 'natural' levels in terms of how it is operationalised through examinations/tests may be more firmly grounded in theory and thus better understood.

Michael Milanovic
Cyril Weir
Cambridge
December 2006

Acknowledgements

In bringing this volume to fruition, the authors are deeply indebted to a great many individuals. Their patience, co-operation and expert counsel has undoubtedly contributed to the success of the volume.

The first group of individuals, instrumental in terms of shaping, reading and commenting on the whole manuscript, include Professor Liz Hamp-Lyons (University of Hong Kong); Dr Sara Cushing Weigle (Georgia State University, USA); and Carole Sedgwick (Roehampton University).

The authors are very appreciative of a number of specialists in the field of language testing who provided expert input and reflection on individual chapters: Dr John Field (Reading University) for his work on cognitive validity; Dr Norbert Schmitt (University of Nottingham) and Dr Felicity O'Dell (Cambridge ESOL Testing Consultant) for their contributions to the chapter on context validity; Dr Paul Thompson (University of Reading) for his review of the scoring validity chapter; and Dr Roger Hawkey (Cambridge ESOL Testing Consultant and University of Bedfordshire) for his reviews of both the consequential validity and criterion-related validity chapters.

Sincere thanks are also due to Dr Barry O'Sullivan (Roehampton University) and Sarah Gysen (Katholieke Universiteit, Leuven) who made a number of insightful comments on various drafts of the manuscripts.

This volume could not have been completed without the additional co-operation of numerous Cambridge ESOL personnel, many of whom enabled the authors to represent fully the various voices within the organisation. We would like first to take the opportunity to acknowledge several individuals from the Assessment and Operations Group who reviewed portions of the manuscript for its comprehensibility and accuracy: Roger Johnson (Director); Anne Gutch (Assistant Director); Edward Hackett (KET/PET Subject Manager); Margaret Cooze (KET/FCE Subject Officer); Beth Weighill (formerly FCE Subject Officer); Mick Ashton (PET Subject Officer); Cris Betts (CAE Subject Officer); and Steve Murray (CPE Subject Officer).

We wish to express our special thanks to Angela ffrench in her role as FCE/CAE/CPE Subject Manager in providing an excellent liaison mechanism between the Research and Validation Group and the Assessment and Operations Group. Her insightful and patient guidance was very much appreciated.

Particular thanks goes to the Chairs of the Writing papers for the diligent and attentive reviews of text relating to their respective areas of interest: Laura Matthews; Elaine Boyd; Diana Fried-Booth; and Annette Capel.

We are also very thankful for the thoughtful and invaluable contributions made by members of the Research and Validation Group: Nick Saville (Director) for overseeing the project; Lynda Taylor (Assistant Director) especially in her editorial capacity; and to the Senior Research and Validation Co-ordinators (Neil Jones, Hanan Khalifa Louhichi and Ardeshir Geranpayeh) for their encouragement and judicious reviewing. Additional thanks goes to Anthony Green (Validation Officer), Fiona Barker (Validation Officer) and Louise Maycock (Validation Officer) for their expert guidance in selected reviews of the volume.

We would like to acknowledge the efforts of Paul Seddon (Projects Office, Cambridge ESOL) for his review of the section relating to computer-based testing and to Meredyth Rodgers (Projects Office, Cambridge ESOL) who was kind enough to critically read those portions of the text describing areas of technological assessment (particularly Electronic Script Management).

And finally we should like to recognise the contribution of Mike Milanovic (Chief Executive of Cambridge ESOL Examinations) for his encouragement throughout the entire project, and his willingness to support future research into issues raised by this study.

The publishers are grateful to the copyright holders for permission to use the copyright material reproduced in this book. Cambridge University Press for extracts and Table 5.1 from *Assessing Writing* by Sara Cushing Weigle, 2002. Cambridge University Press for Table 1.1 from *Common European Framework of Languages: Learning, teaching, assessment* by Council of Europe, 2001. Longman Pearson for Table 2H based on *Measuring Second Language Performance* by Tim McNamara, 1996. Palgrave Macmillan for extracts and Figure 1.1 from *Language Testing and Validation* by Cyril J. Weir, 2005.

Contents

List of abbreviations vi
Series Editors' note ix
Acknowledgements xiii

1 Introduction 1
2 Test-taker characteristics 17
3 Cognitive validity 34
4 Context validity 63
5 Scoring validity 143
6 Consequential validity 218
7 Criterion-related validity 229
8 Conclusions and recommendations 241

Appendices

Appendix A: Sample Writing tasks from Main Suite examinations 258
Appendix B: Candidate Information Sheet 272
Appendix C: Revised method of assessment for IELTS Writing 274
Appendix D: Current Cambridge ESOL rating procedures and marking models 275
Appendix E: Standard procedures for the production of Writing examination materials 284
Appendix F: Minimum Professional Requirements for examiners of ESOL Writing tests 289
Appendix G: Computer-based (CB) exam versions: Issues and directions 294
Appendix H: Electronic Script Management in Cambridge ESOL: Issues and directions 300

References 315
Index 339

Abbreviations

AE	Assistant Examiner
ALTE	Association of Language Testers in Europe
ANOVA	Analysis of variance
ANCOVA	Analysis of covariance
APE	Assistant Principal Examiner
AWL	Academic Word List
BEC	Business English Certificates
BMF	Batch Monitoring Form
BNC	British National Corpus
BULATS	Business Language Testing Service
CAE	Certificate in Advanced English
CB	Computer-based
CB IELTS	Computer-based International English Language Testing System
CB PET	Computer-based Preliminary English Test
CBT	Computer-based testing
CCSE	Certificates in Communicative Skills in English
CEFR	Common European Framework of Reference
CELS	Certificates in English Language Skills
CET	College English Test
CIS	Candidate Information Sheet
CLC	Cambridge Learner Corpus
CM	Clerical Marker
CMS	Clerical Marking Supervisor
Co-Ex	Co-ordinating Examiner
CPE	Certificate of Proficiency in English
CRELLA	Centre for Research in English Language Learning and Assessment
CSW	Common Scale for Writing
CUEFL	Communicative Use of English as a Foreign Language
DIF	Differential Item Functioning
EAP	English for Academic Purposes
EAQUALS	The European Association for Quality Language Services
EFL	English as a Foreign Language
ELT	English Language Teaching

EM	Examinations Manager
EPS	Examinations Processing System
ERM	Electronic Return of Marks
ESL	English as a Second Language
ESLPE	English as a Second Language Placement Examination
ESM	Electronic Script Management
ESOL	English for Speakers of Other Languages
ESP	English for Specific Purposes
ETS	Educational Testing Service
FCE	First Certificate in English
FSI	Foreign Service Institute
FUEL	File Uploads from External Locations
GMAT	Graduate Management Admission Test
GMS	General Mark Scheme
IATM	Instrument for the Analysis of Textbook Materials
IEA	Intelligent Essay Assessor
IELTS	International English Language Testing System
IIS	IELTS Impact Study
ILEC	International Legal English Certificate
ILSSIEA	Instructions to Local Secretaries, Supervisors and Invigilators for Examination Administration
IRT	Item Response Theory
KET	Key English Test
LIBS	Local Item Banking System
LSA	Latent Semantic Analysis
LTRC	Language Testing Research Colloquium
MFI	Mark from Image
MFO	Mark from Object
MFR	Multi-faceted Rasch
MFRM	Multi-faceted Rasch Measurement
MFS	Mark from Script
MS	Main Suite
NLP	Natural Language Processing
NNS	Non-native speaker
NS	Native speaker
OMR	Optical Mark Reader
PA	Paper Administrator
PE	Principal Examiner
PEG	Project Essay Grader
PET	Preliminary English Test
QPP	Question Paper Production
QPT	Quick Placement Test
RCEAL	Research Centre for English and Applied Linguistics

RITCME	Recruitment, Induction, Training, Co-ordination, Monitoring, Evaluation
RNIB	Royal National Institute for the Blind
RTL	Regional Team Leader
SEM	Standard Error of Measurement
SO	Subject Officer
TCT	Text Categorisation Techniques
TEEP	Test in English for Educational Purposes
TKT	Teaching Knowledge Test
TL	Team Leader
TOEFL	Test of English as a Foreign Language
TSMS	Task Specific Mark Scheme
TWE	Test of Written English
UCLES	University of Cambridge Local Examinations Syndicate
VRIP	Validity, Reliability, Impact, Practicality
YLE	Young Learners English Tests

1 Introduction

Purpose of the volume

Language testing in Europe is faced with increasing demands for accountability in respect of all examinations offered to the public. Examination boards are increasingly being required by their own governments and by European authorities to demonstrate that the language ability constructs they are attempting to measure are well grounded in the examinations they offer. Furthermore, examination boards in Europe are being encouraged to map their examinations on to the Common European Framework of Reference (CEFR) (Council of Europe 2001), although some reservations have been expressed within the testing community as to the comprehensiveness of this instrument for practical test development and comparability purposes.

Weir (2005a) argues that a more comprehensive, coherent and transparent form of the CEFR would better serve language testing. For example, the descriptor scales could take increased account of how variation in terms of contextual parameters (i.e. specific features of the Writing task or context) may affect test performance; differing contextual parameters can lead to the raising or lowering of the level of difficulty involved in carrying out the target writing activity represented by a Can Do statement, e.g. 'can write short, simple formulaic notes'. In addition, a test's cognitive validity, which is a function of the cognitive processing involved in carrying out a writing activity, must also be explicitly addressed by any specification on which a test is based. Without such contextual and cognitive-based validity parameters, i.e. a comprehensive definition of the construct to be tested, current attempts to use the CEFR as the basis for developing comparable test forms within and across languages and levels are weakened, and attempts to link separate assessments particularly through social moderation by expert judges hampered.

Weir feels that the CEFR is best seen as a heuristic device rather than a prescriptive one, which can be refined and developed by language testers to better meet their needs. For this particular constituency its current limitations mean that comparisons based on the illustrative scales alone might prove to be misleading given the insufficient attention paid in these scales to issues of validity. The CEFR as presently constituted is not designed to say with any degree of precision or confidence whether or not tests are comparable, nor does it equip us to develop comparable tests. Instead, a more explicit test validation framework is required which better enables examination providers to furnish comprehensive evidence in support of any claims about the sound theoretical basis of their tests.

Examination boards and other institutions offering high-stakes tests need to demonstrate and share how they are seeking to meet the demands of validity in their tests and, more specifically, how they actually operationalise criterial distinctions between the tests they offer at different levels on the proficiency continuum. This volume represents a first attempt to articulate the Cambridge ESOL approach to assessment in the skill area of writing. The perceived benefits of a clearly articulated theoretical and practical position for assessing writing skills in the context of Cambridge ESOL tests are essentially twofold:

- Within Cambridge ESOL – it will deepen understanding of the current theoretical basis upon which Cambridge ESOL tests different levels of language proficiency across its range of test products, and will inform current and future test development projects in the light of this analysis. It will thereby enhance the development of equivalent test forms and tasks.
- Beyond Cambridge ESOL – it will communicate in the public domain the theoretical basis for the tests and provide a more clearly understood rationale for the way in which Cambridge ESOL operationalises this in its tests. It will provide a framework for others interested in validating their own examinations and thereby offer a more principled basis for comparison of language examinations across the proficiency range than is currently available.

We build on Cambridge ESOL's traditional approach to validating tests, namely the VRIP approach where the concern is with Validity (the conventional sources of validity evidence: construct, content, criterion), Reliability, Impact and Practicality. The work of Bachman (1990) and early work of Bachman and Palmer (1996) underpinned the adoption of the VRIP approach, as set out in Weir and Milanovic (2003), and it can be traced back to about 1993 in various Cambridge ESOL documents on validity.

We explore below how a socio-cognitive validity framework described in Weir's *Language Testing and Validation: An evidence-based approach* (2005b) might contribute to an enhanced validation framework for use with Cambridge ESOL examinations. Weir's approach covers much of the same ground as VRIP but it attempts to reconfigure validity to show how its constituent parts (context, cognitive processing and scoring) interact with each other. The construct is not just the underlying traits of communicative language ability but is the result of the constructed triangle of trait, context and score (including its interpretation). The traditional 'trait-based' approach to assessment had to be reconciled with the traditional 'task-based' approach (the CUEFL/CCSE approach and to some extent traditional Cambridge approach). The approach adopted in this volume is therefore effectively an *interactionalist* position which sees the construct as residing in the interactions between the underlying cognitive ability and the context of use – hence the socio-cognitive model.

In addition it conceptualises the validation process in a *temporal frame* thereby identifying the various types of validity evidence that need to be collected at each stage in the test development, monitoring and evaluation cycle. A further difference of the socio-cognitive approach as against traditional approaches is that the construct is now defined more specifically. Within each constituent part of the validation framework, criterial individual parameters for distinguishing between adjacent proficiency levels are also identified.

The conceptualisation of test performance suggested by Weir (2005b) is represented graphically in Figure 1.1.

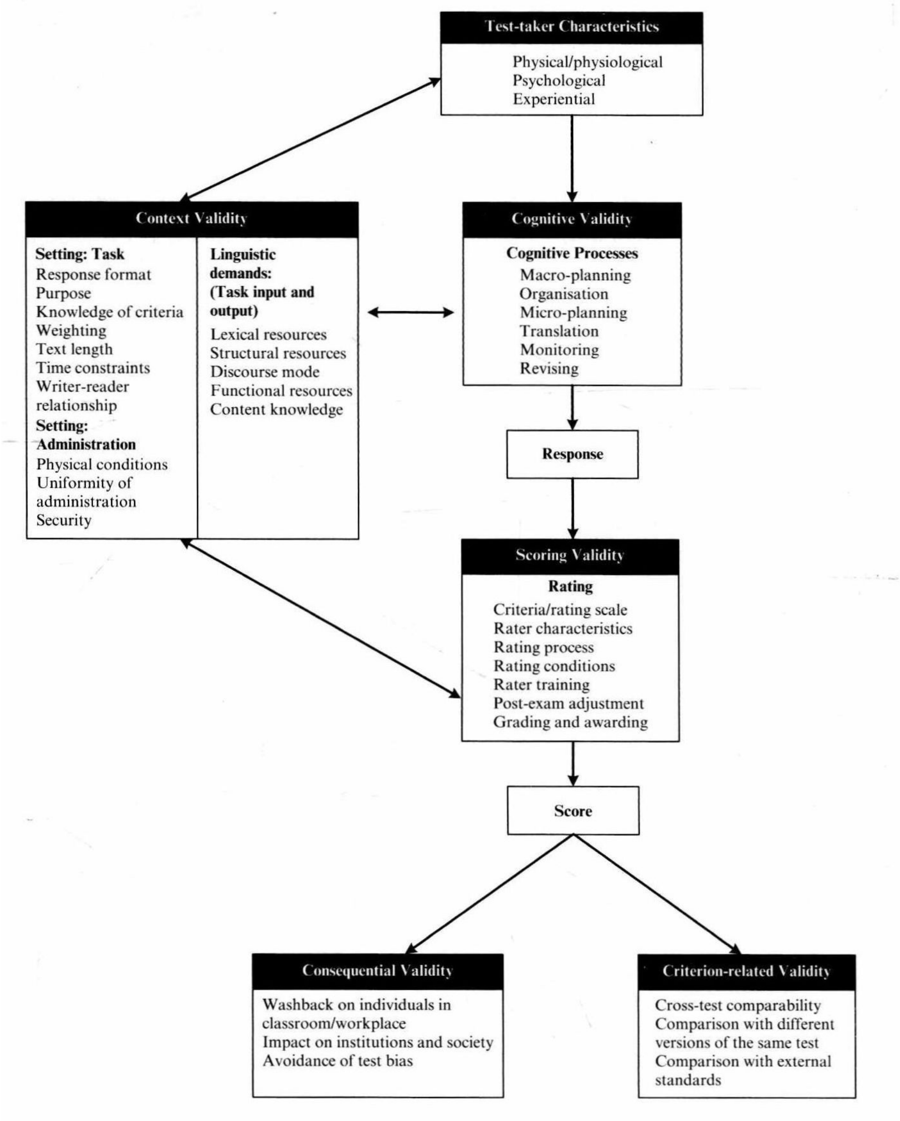
The framework is socio-cognitive in that the abilities to be tested are demonstrated by the mental processing of the candidate (the cognitive dimension); equally, the use of language in performing tasks is viewed as a social rather than a purely linguistic phenomenon. The framework represents a unified approach to establishing the overall validity of a test. The pictorial representation is intended to depict how the various validity components (the different types of validity evidence) fit together both temporally and conceptually. 'The arrows indicate the principal direction(s) of any hypothesised relationships: what has an effect on what, and the timeline runs from top to bottom: before the test is finalised, then administered and finally what happens after the test event' (2005b:43). Conceptualising validity in terms of temporal sequencing is of value as it offers a plan of what should be happening in relation to validation and when it should be happening.

The framework represented in Figure 1.1 comprises both *a priori* (before-the-test event) validation components of context and cognitive validity and *a posteriori* (after-the-test event) components of scoring validity, consequential validity and criterion-related validity. Weir notes:

> The more comprehensive the approach to validation, the more evidence collected on each of the components of this framework, the more secure we can be in our claims for the validity of a test. The higher the stakes of the test the stricter the demands we might make in respect of all of these (Weir 2005b:47).

A number of critical questions will be addressed in applying this socio-cognitive validation framework to Cambridge ESOL examinations across the proficiency spectrum:

Figure 1.1 A framework for conceptualising writing test performance (adapted from Weir 2005b:47)



- How are the physical/physiological, psychological and experiential characteristics of candidates catered for by this test? (focus on the test taker)
- Are the cognitive processes required to complete the test tasks appropriate? (focus on cognitive validity)