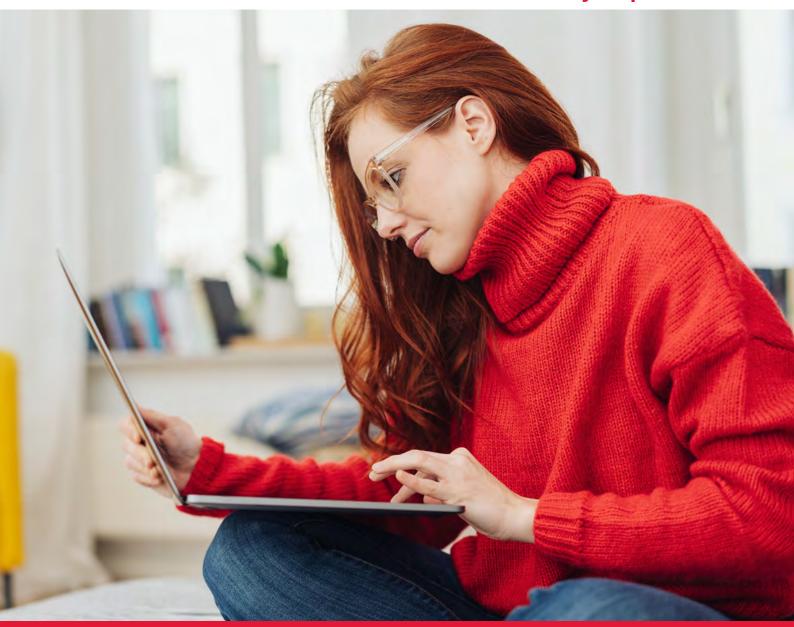# IELTS Research Reports
Online Series

Safeguarding equity, access and inclusion in IELTS: A comprehensive review and audit of special arrangements offered to IELTS test-takers with accessibility requirements

Chihiro Inoue and Lynda Taylor

Safeguarding equity, access and inclusion in IELTS: A comprehensive review and audit of special arrangements offered to IELTS test-takers with accessibility requirements

Special arrangements are designed for test-takers with a disability or who need specific access arrangements to take an exam. They enable all IELTS test-takers to sit an accessible version of the test and for their performance to be assessed fairly. The aim of this review was to audit these special arrangements against some of the research literature on special educational needs and in light of what is currently considered good policy and practice. It also elicited stakeholder attitudes, perceptions and experiences of the existing testing accommodations and, where appropriate, made recommendations to IELTS for the future.

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Introduction

This study by Inoue and Taylor was conducted with support from the IELTS Partners (British Council, IDP: IELTS Australia, and Cambridge University Press & Assessment), as part of the IELTS joint-funded research program. Research funded by the British Council and IDP: IELTS Australia under this program complement those conducted or commissioned by Cambridge University Press & Assessment, and together inform the ongoing validation and improvement of IELTS.

A significant body of research has been produced since the joint-funded research program started in 1995, with over 200 empirical studies receiving grant funding. After undergoing a process of peer reviews and revision, many of the studies have been published in academic journals, in several IELTS-focused volumes in the *Studies in Language Testing* series (http://www.cambridgeenglish.org/silt), and in the *IELTS Research Reports* series. Since 2012, to facilitate timely access, the research reports have been published on the IELTS website immediately after completing the peer review and revision process.

The potential impact of international standardised tests on classrooms and society is vast and prevailing. As the educational landscape of language testing evolves, as does an inherent social responsibility to decrease systemic inequities within the classroom and even beyond the attainment of a test score certificate. Testing organisations and exam boards are increasingly embedding equality, diversity and inclusion (EDI) into their policies and practices, aiming to standardise procedures that promote fairness, justice and ethics for marginalised test-takers.

This report reviews evidence of the operationalisation of these matters for IELTS test-takers with short-term or permanent disabilities and conditions. These tailored reasonable arrangements and accommodations are arranged for candidates with specific needs to facilitate the test delivery and ensure an accurate reflection of their true abilities and linguistic competences, thereby promoting fairness and equity in assessment. The methodology of the report applies multiple theoretical socio-cognitive and validity frameworks with an analysis of public and internal IELTS documentation and consultation with expert informants and stakeholder groups using questionnaires and interviews to assess the appropriateness and effectiveness of a range of accommodations for these test-takers who may be disadvantaged and require extra support.

The results indicated that a broad range of accommodations form a foundation of good practice but also revealed concerns about construct validity and consistency in process implementation. Suggested improvements included clearer communication, regular and targeted training, and further engagement with key stakeholders.

The rationale for this research is to align best practices and research literature by auditing existing test accommodations for IELTS and to provide recommendations for the IELTS Partners and other international test providers. The study furthers the test delivery intelligence cycle by reviewing feedback and insights from key stakeholders including test developers, examiners, educational policymakers and test-takers themselves.

The key findings and results of this review inform policy and practice by contributing to a growing literature on ethical assessment and affirms the IELTS commitment to providing fair and valid assessments for all test-takers.

GEMMA BELLHOUSE AND DAMON YOUNG
BRITISH COUNCIL

Safeguarding equity, access and inclusion in IELTS: A comprehensive review and audit of special arrangements offered to IELTS test-takers with accessibility requirements

Abstract

This study undertook an in-depth review of the special arrangements (SAs) offered by the International English Language Testing System (IELTS). The aim was to audit the IELTS SAs in light of what was considered good policy and practice within the language testing and assessment profession at the time. It also sought to elicit stakeholder attitudes, perceptions and experiences of the range of IELTS accommodations offered.

The researchers contextualised their study within current understandings of ethics, fairness, social justice and validity concerns in the field of language testing and assessment, especially as these concern test-takers with special educational needs who may require some form of testing accommodation, i.e., a departure from the standard test in terms of content, format, delivery or scoring approach. The descriptive review and evaluative audit of IELTS SAs drew upon recent frameworks developed and applied in the field of language testing and assessment, including a socio-cognitive framework for language test development and validation and tools for evaluating test fairness and contexts of use.

Methodological approaches included: desk-based documentary analysis of publicly available material; consultation with professional experts in special educational needs and disability via questionnaire completion; application of analytical tools to the accommodated tasks for the four IELTS test components; survey questionnaires with targeted IELTS stakeholders; interviews with selected IELTS stakeholders (e.g., test designers, test takers, test centre staff) to elicit their attitudes, perceptions and lived experiences. Data analyses provided a full description of the different accommodation types offered (at that time) for IELTS test-takers with visual, hearing/speaking and specific learning difficulties, as well as provision for the use of assistive (access) technology in IELTS.

The researchers highlighted some important issues to emerge from their study and made over 20 tentative recommendations for the IELTS Partners to consider for the future.

Authors' biodata

Dr Chihiro Inoue is Associate Professor of Language Assessment at the Centre for Research in English Language Learning and Assessment (CRELLA) at the University of Bedfordshire, UK. She has led a number of research projects funded by examination boards and educational institutions around the world and published in peer-reviewed journals such as *Language Assessment Quarterly, Assessment in Education, Assessing Writing*, and *Language Learning Journal*. She also gives invited talks for policymakers, in-service teachers, graduate students, and testing organisations on topics such as principles in language testing, connecting testing and teaching, and classroom-based assessment. Her long-standing research interest lies on test task design, the criterial features of learner language that differentiate across proficiency levels, and the cognitive processes involved in speaking assessment. Her expertise in how test task characteristics influence test-takers' cognitive processes and speech production has found significant application in her emerging research area of test accommodations.

Professor Lynda Taylor is Visiting Professor at the Centre for Research in English Language Learning and Assessment (CRELLA) at the University of Bedfordshire, UK. She has worked for nearly 40 years in the field of language teaching, learning and assessment, first as an ELT teacher and teacher educator, later as a materials developer and assessment researcher, particularly with IELTS and the full range of Cambridge English qualifications. Her research interests include speaking/writing assessment, testing accommodations for language learners with special needs, and the development of language assessment literacy. She was formerly Assistant Research Director with Cambridge Assessment English and has advised on test development and validation projects worldwide, including Europe, North America and Asia. She authored or edited many of the volumes in CUP's *Studies in Language Testing* series. In 2022 she was awarded Fellowship of the UK Academy of Social Sciences and received the Cambridge/ILTA Distinguished Achievement Award for 2024.

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1.   Introduction

As part of the annual IELTS Joint-Funded Research Program, the IELTS Partners (British Council and Cambridge University Press & Assessment) commissioned an external research team to undertake an in-depth review of the full range of special arrangements currently offered by the International English Language Testing System (IELTS).[1]

Special arrangements[2] – also known as 'access arrangements' or 'testing accommodations' – are designed and delivered for test-takers with a disability (whether temporary or long-term), or who need specific access arrangements to enable them to take an exam. The aim is to enable all IELTS test-takers to be able to take an accessible version of the test and for their performance to be assessed fairly.

1.1   Rationale for the review project

The aim of the review, conducted between 2022 and 2024, was to audit the special arrangements offered to IELTS test-takers at that time against some of the research literature on special educational needs and in light of what is currently considered good policy and practice in the language testing and assessment profession, both nationally and internationally. It also sought to elicit stakeholders' attitudes, perceptions and experiences of multiple aspects of the existing range of testing accommodations offered and, where appropriate, make relevant and constructive recommendations for the future.

The research project was funded by the IELTS Partners and conducted by two experienced researchers from the Centre for Research in English Language Learning and Assessment (CRELLA) at the University of Bedfordshire, UK.

1.2   Rationale for this report of the study

For reasons of confidentiality, the full report of the research study (which extends to almost 250 pages) remains an internal proprietary document, as it was produced primarily to inform policy and practice for the benefit of the IELTS Partners as the test providers. This shorter, more accessible report of the study describes various aspects of the research undertaken and its findings for the benefit of a wider, more general audience, e.g., available via the IELTS website. This abridged version of the full research report contains:

- an explanation of the background context for the study
- a summary of the literature review
- a description of the research methodology used
- a summary of the results, with discussion of the findings
- a summary of the conclusions and recommendations
- a list of selected references.

A research paper based upon the study is also currently in preparation for potential journal publication in the future. The published article will describe in detail the methodological approach used for this study so that the approach can be adopted or adapted by other test providers wishing to undertake a similar study to review and audit their own access provision.

[1] Details of the current special arrangements for IELTS are available at: IELTS | Access arrangements

[2] At the start of the project in 2022, the terminology used by IELTS was 'special arrangements'; this has since been replaced with the term 'access arrangements'.

2. Background context for the study

The COVID pandemic in 2020 highlighted important issues of fairness and justice for disadvantaged sectors of society, including access to assessment opportunities within education. Population subgroups whose access to assessment requires safeguarding include language learners living with disabilities and others who typically require special arrangements, accommodations or 'reasonable adjustments', e.g., extra time or special equipment, when taking a language proficiency test.

2.1 The commitment of responsible test providers

Like most other test providers, the IELTS Partners are sensitive and attentive to the needs of IELTS test-takers with accessibility requirements. Through their central services and local IELTS test centres, they make strenuous efforts to offer appropriate arrangements to enable the language ability of all test-takers, whatever their specific needs, to be assessed fairly and objectively.

Funded under the IELTS Joint-Funded Research Program, this study aimed to scrutinise the current accommodations provision for IELTS to gauge how well it was functioning and to identify any areas which might need to be adjusted or refined as part of a cycle of continuous improvement for the test. A key aim of the IELTS Joint-funded Research Program is to ensure that the test remains contemporary, relevant and useful, both for those individuals who take the test and for those organisations who use IELTS results. A further stated aim of the funded program is to enable IELTS to contribute to a growing understanding of the nature of language proficiency and its place within linguistics and language education.

2.2 Growing interest in fairness, justice, ethics and social responsibility

The past twenty years have seen a steady growth of interest in matters of fairness, justice, ethics and social responsibility in language testing and assessment, so focused attention on theory and practice in this area is both relevant and timely. Considerable progress has also been made in recent years to identify learners requiring extra educational support in learning, teaching and assessment, given that the percentage of the population living and studying with disabilities is now recognised to be much higher than was once acknowledged.

In 2011, the first ever World Health Organisation (WHO) Report on disability estimated somewhere in the region of 15% of the global population to be living with some form of disability, of whom 2–4% experienced significant difficulties in functioning.[3] It has also been estimated that as many as 15–20% of people are living with a language-based learning difficulty and having to manage its implications for their learning and assessment experience, the most common of these difficulties being dyslexia (International Dyslexia Association, 2012[4]).

[3] World Report on Disability (who.int)

[4] Frequently Asked Questions - International Dyslexia Association (dyslexiaida.org)

2.3 Changing perceptions of disability

The 2011 WHO Report rightly stressed the highly diverse nature of disability, extending beyond stereotypical views that emphasise wheelchair users and a few other 'classic' groups such as blind people and deaf people (2011, p.7). In addition, it noted a transition since the 1970s from an individual, medical perspective to a structural, social perspective, in which people are viewed as being disabled by society and the environment, rather than by their individual physical or other conditions i.e., a shift from a medical model to a social model.

Perspectives, policy and praxis relating to disability continue to vary and evolve in different parts of the world, for historical, political, socio-cultural and other reasons, and this can be reflected in the terminology and discourse used. For example, what might be framed in one regional context as a disability (e.g., dyslexia, dyspraxia) might in another context be considered and labelled as a specific learning difference (SpLD) to reduce the risk of stigmatisation.

3. Review of relevant literature

A literature review conducted in the early part of the project set the scene for the research by mapping out developing understandings of ethics, fairness, social justice and validity concerns in the field of language testing and assessment over recent decades, especially as these concern test-takers with special educational needs who may require a departure from the standard test in terms of content, format, delivery or scoring approach.

3.1 Drawing on available frameworks for the research

The descriptive review and evaluative audit of IELTS special arrangements drew upon several frameworks developed and applied in the field of language testing and assessment over recent years. They included a socio-cognitive framework specifically created for language test development and validation purposes (O'Sullivan & Weir, 2011; Weir, 2005) as well as frameworks for evaluating test fairness and for considering the contexts of test use through an ethical lens (Kunnan, 2004, 2008). These resources were used to inform and shape the research questions, methodology and tools employed in the study.

Building upon earlier conceptualisations in the 1990s for exploring test washback and impact, Chalhoub-Deville & O'Sullivan (2020) extended the socio-cognitive approach calling attention to the importance of principled test design and the requirement for evidence to be accumulated from various groups involved in test design and development. They promoted the concept of 'impact by design', which places consequences at the top of the evidence chain to guide all testing efforts and quality documentation. Test validity scholarship is today seen as attending to impact and consequences at the individual, aggregate/group and larger educational/organisational/ societal levels, ideally involving all stakeholders in a process of communicative engagement.

3.2 The importance of stakeholder perspectives

Kormos & Taylor (2021) placed considerable emphasis on the value of gathering and understanding stakeholder perspectives on accommodated tests in particular, citing previous work done in this area (Shaw & Weir, 2007; Taylor & Khalifa, 2013). With this in mind, the current study placed a strong focus on engaging with the multiple stakeholder groups involved in the provision and/or use of testing accommodations in the IELTS test. These include those who are directly involved in developing or delivering accommodated versions of IELTS, or in taking IELTS or using IELTS scores. It also includes those who are less involved in the test directly, but who are stakeholders by virtue of being expert informants or advisers, e.g., those representing disability advocacy groups and educational policymakers.

3.3 Approaches to evaluating language assessments

Kunnan (2018) adopted an argument-based approach to develop thinking on test fairness, presenting two overarching principles, one for fairness and one for justice, to enable fair decisions and just social outcomes to be achieved. The argument-based approach, strongly influenced by the work of Kane (1992, 2013) and by the work of Chapelle (2012, 2020), is premised on the adherence to principles and associated sub-principles that permit warrants and claims to be made regarding fairness and justice, which are themselves supported by demonstrable evidence. Such evidence typically comes in the form of test documentation (e.g., design documents, administration protocols, etc.) or empirical outcomes from operational or research activities conducted on the test in question. The extent and the strength of evidence brought forward to support claims concerning fairness and justice associated with a given test, and the meaningfulness of its scores, are what underpin the essential validity argument.

Even when they work hard to offer a range of appropriate accommodations for test-takers with disabilities, responsible test providers rarely seem to provide much supportive evidence underpinning a validation argument for the accommodations offered, either in the form of test-related documentation (e.g., design documents, administration protocols, etc.) or any empirical outcomes from operational or research activities conducted on the test accommodations in question. Information in the public domain (i.e., on a testing organisation's website) is typically limited to: (i) the list of accommodations which the testing agency offers to meet specific need categories (e.g., visual, hearing/speaking or learning difficulties – occasionally with sample materials to view); and (ii) an explanation of the procedures for requesting special arrangements. Beyond this, there is generally little or no information about the rationale for the accommodations offered by the examination board, nor any discussion of the professional expertise that goes into designing and developing accommodated tests to ensure their quality and fairness, nor any reference to other supportive validation evidence in the form of relevant research studies, whether conducted internally or externally.

3.4 A lack of relevant theoretical and empirical research

Test providers are not helped by the lack of studies in this area undertaken by the wider academic language testing and assessment community. Recent efforts to address this shortfall through publication of the 2023 special issue of *Language Testing* journal which profiled various accommodations-related studies are long overdue. Another positive development is the growing willingness of some test providers (e.g., IELTS, Duolingo) to invite and fund external studies of their test accommodations provision in recent years. The study being reported here falls into this category as part of the IELTS Partners Funded Research Program 2021. A key motivation behind the IELTS study was to shine a spotlight on the provision of accommodations for IELTS test-takers as part of the complex process of gathering evidence and building a validation argument to support claims of test fairness and justice.

Codes of ethics and guidelines for good practice for the language testing and assessment profession do often include some general reference to the rights and responsibilities of language test developers and users as they concern test-takers with disabilities. Such high-level documents highlight the critical importance of fairness and accessibility as a high-level principle, but they cannot provide detailed practical guidance for test developers or test users (see, for example, ILTA 2000/2018, ILTA 2007/2020). The latest ALTE Code of Practice (2020) does explicitly mention the need, where feasible, to provide appropriate accommodation or administration procedures for candidates with special needs but it does not offer specific guidance on how to do this.

A welcome recent development is the establishment in 2022 of a Special Interest Group within the European Association of Language Testing and Assessment (EALTA); the new SIG aims to provide a forum for discussion of equity, diversity and inclusion (EDI) (including special needs and disability) which seeks to 'mainstream' EDI thinking and practice into assessment practices.

3.5 The concept and application of universal design

The notion of universal design dates back to the middle of the 20th century and has its origins in the field of architecture, where the aim was to remove obstacles in and around public and private buildings for people with disabilities. This might mean retrofitting existing properties and venues, or changing the methodology for designing new ones so as to facilitate barrier-free access from the outset for everyone, regardless of disability, age, etc. Over time, the concept of universal design (sometimes referred to as 'accessible design') extended beyond architecture to be taken up in fields such as engineering, product development and education. The concept has become particularly influential in some contexts, where Universal Design for Learning (UDL) principles are now adopted to shape the design of educational curricula and testing arrangements for English language learners.

A Policy Report written by Case (2003) and republished by Pearson Education Inc. (2008) discusses what the application of universal design principles to an assessment system might look like – it entails 'a blend of good test design, considering as many users as possible, blending assistive technology where appropriate, and building in appropriate visual design' (p. 4). An important feature of the Pearson test development process was reported to be the exposure of items during the item review phase to people representing minority and disabled groups who screen the test content in terms of appropriateness for various groups as well as for bias; the aim is to ensure the assessment is inclusive, accessible and valid for the widest range of students. Though not new in one sense[5], this type of internal review process, which is designed to check test materials, tasks and items for any issues of sensitivity, bias or accessibility, is increasingly used by responsible testing organisations – examples include Trinity College London (n.d.) and British Council (2022).

[5] Kunnan (2018) notes that Educational Testing Service (ETS) had a *Test Sensitivity Review Process* in place as far back as 1980.

One of the challenges with the notion of universal design is that it appears to run counter to providing individually appropriate assessment options for learners that are 'tailored' or 'accommodated' as far as possible to their specific personal needs. While the idea of a fully inclusive, accessible and valid language proficiency test, designed to be suitable for all, is very attractive in theory, in practice any such test is unlikely to match the needs of every student given the range of disabilities that are present and recognised nowadays in the population. Kormos and Taylor (2021) note that some experts in educational measurement have advocated universal design as a means of rendering accommodations unnecessary (Sireci, Scarpati and Li, 2005). However, the practicalities in test production and delivery, combined with the complex and varied needs of individual test-takers with disabilities may make this unrealistic, if not impossible (e.g., for visually impaired test-takers who can only use braille).

3.6 Challenges for providers of language testing accommodations

A number of challenges for providers of language testing accommodations can thus be identified, including:

- the burden of expectation and responsibility placed upon test providers to advise on, and provide, suitable accommodations

- the complex decision-making processes needed to identify the most appropriate test accommodation(s) for an individual

- the lack of professional training in test item/task writing for accommodated materials (and comparable training needed for raters of writing/speaking performance)

- the variety of educational practices, cultural attitudes and legislative frameworks worldwide concerning disability that can impact on accommodations provision for an internationally recognised test

- the challenge to communicate outcomes from accommodated tests (i.e., scores, grades) in a responsible, transparent and meaningful way

- the absence of appropriate research findings to support the valid use of some accommodations with some testing populations

- the cost, expertise and logistics involved in accommodations provision, including challenges for test centres and administrative staff.

Despite these potential challenges, most reputable test providers now acknowledge accommodations to be an important area of their assessment provision, no longer relatively marginal to their operations but core to understanding their professional ethic as partners in education and contributors to the social good, as well as their organisational commitment to fairness, diversity and inclusion. The necessity and value of comprehensive and inclusive stakeholder engagement is far better understood today than it was twenty to thirty years ago and the importance of effective communication with all test stakeholders is now generally accepted as located within a larger conceptual framework for test validation and fairness (Chalhoub-Deville and O'Sullivan, 2020). As a result, test providers aim to provide relevant and up-to-date information that is appropriately tailored to a variety of stakeholder audiences.

There remains some work to do, however, to identify how to improve communication with the specific stakeholder groups who have a direct interest in testing accommodations, e.g., test-takers with disabilities, parent and carers, teachers of learners requiring testing accommodations, users of accommodated test scores, disability advocacy groups, etc. Test providers generally take care to describe in some detail the nature of the accommodations they offer as part of their commitment to fairness and ethical practice – whether for a public or internal audience. However, as mentioned above, it is rare to see a test provider explain the justification for what they offer or for the way their provision and decision-making in this area is informed by relevant research, or even to reference the expert assistance from disability specialists with whom they may routinely collaborate. A key rationale for the study reported here was to explore further how that level of stakeholder engagement might be achieved, to determine the nature of the information sought by such audiences and also to make more transparent and explicit the rationale/justification for the provisions put in place by a test provider.

3.7 Summary of key considerations arising from the literature review

Accommodations have not generally been part of mainstream thinking and activity in language testing and assessment, possibly even considered something of an 'inconvenience' or an 'embarrassing compromise', due to the non-standard nature of accommodations in a business which understandably prioritises standardisation in assessment. This likely reflects a long-established trend in society more broadly over many years where those with disabilities were under-represented and often poorly-served as a result. Learners and test-takers requiring accommodations have not therefore received the attention they were due.

To some degree, this situation has changed for the better, with society moving away from a 'medical' model towards a more 'social' model as far as disability is concerned, and as rights to access and opportunity have been proactively sought and steadily enshrined in legislation. At the same time, a concern for ethics, fairness and social justice in language assessment, together with growing understanding of test validity issues, has reshaped the landscape in our field and has foregrounded matters of equity, diversity, access and inclusion, especially as it relates to test accommodations.

This literature review has hopefully highlighted a number of key considerations which directly informed this study, shaping its aims and overall design, and threading their way through the rest of the report. Such considerations include:

1. adopting a principled and systematic approach using established frameworks

2. taking an ethical perspective on test fairness and validity issues

3. considering accommodations within the systemic nature of (language) assessment

4. balancing 'universal design' principles with 'individualised' accommodations

5. acknowledging the challenges and opportunities facing test providers in terms of professional expertise and decision-making

6. engaging in effective communication with key stakeholders.

4. Methodology

Two overarching research questions, accompanied by two sub-questions, guided the direction and conduct of the study as follows.

RQ1: What types of accommodations are available in IELTS for test-takers requiring special arrangements?

    RQ1a: How do they map to currently available research and practice on special educational needs?

    RQ1b: How do they align with current theory and best practice in language testing and assessment?

RQ2: What are various stakeholders' attitudes, perceptions and experiences of the current accommodations provided for IELTS?

The methodology used to review and audit the special arrangements offered to IELTS test-takers with accessibility requirements involved a range of approaches, including:

- desk-based documentary analysis (RQ1)
- consultation with professional experts via questionnaire completion (RQ1)
- application of a socio-cognitive and other framework tools to the accommodated tasks for the four IELTS components: Listening, Academic Reading[6], Academic Writing, Speaking (RQ1)
- survey questionnaires with targeted IELTS stakeholders (RQ2)
- interviews with selected/representative IELTS stakeholders (RQ2)

4.1   Investigating Research Question 1 (RQ1)

RQ1 sought first to establish the range of accommodation types available for IELTS test-takers requiring special arrangements, and then to explore how these appear to align with current research and practice on special educational needs, as well as with current theory and good practice in language testing and assessment. This part of the study drew upon three main resources to gather relevant data for analysis:

- information on organisational websites and in other published documents for a desk-based documentary analysis
- consultation with professional experts in the field of special educational needs and disability via questionnaire completion
- application of a socio-cognitive framework and other tools to the accommodated tasks for the four IELTS components: Listening, Academic Reading, Academic Writing, Speaking.

4.1.1   Reviewing public and internal information on special requirements provision for IELTS

Investigation of RQ1 began with a detailed review of the information on IELTS special requirements provision currently available for different IELTS stakeholders. This included both information that is freely available in the public domain[7], and policy and procedures that are internal and confidential; the latter were provided to us by the IELTS Partners in confidence for the purposes of this study. While the publicly available information is intended for those who might be described as 'external' test stakeholders (i.e., test-takers, score users, teachers), the proprietary (and sometimes confidential) information is designed for, and thus restricted to, more 'internal' stakeholders (e.g., test developers, test centre staff, test administrators, test examiners).

4.1.2   Developing and administering an online survey questionnaire for expert informants

A descriptive analysis of the accommodated task formats was then used to design an online consultation exercise to be conducted with acknowledged professional experts from the field of special educational needs and disability. The consultation exercise consisted of a specially designed survey questionnaire listing the 13 different types of special arrangement available across the four IELTS test modules (Academic Reading, Academic Writing, Listening and Speaking). It invited professional responses and comments on different aspects of each type in turn. The first draft survey questionnaire was piloted with a university academic who is internationally recognised for their advocacy in support of equity, diversity and inclusion (EDI), particularly in education and employment, and who is also familiar with the use of large-scale English language proficiency tests for university admission purposes.

[6] This project focused only on the IELTS Academic Reading/Writing Modules, not General Training (GT) Reading/Writing, for the following reasons: the task-types across Academic and GT Reading and Writing are broadly similar; candidate numbers for Academic are much higher than for GT (approx. 80% of the total candidature according to the test-taker performance data for 2022 shown on the IELTS website); the IELTS Partners make no distinction in the nature of accommodations provision for Academic and GT.

[7] See link to IELTS | Special Requirements

After minor adjustments for clarification, the questionnaire was converted to an online format using Jotform. The 16-page online Consultation with Expert Informants Questionnaire comprised a set of closed multiple choice response questions concerning each accommodation type, complemented with open free text boxes inviting expert observations and comments on a range of issues. The form included clear information concerning research protocols (i.e., research aims and objectives, data privacy, etc.) and ended with an optional invitation for respondents to provide some basic information on their background, the nature of their expertise and their length of experience in the field. The expert informants consulted were primarily identified as named individuals or organisations with professional expertise and experience in relation to learners/ students with (i) visual difficulties, (ii) hearing/speaking difficulties and (iii) specific learning differences (i.e., representative of the three main disability categories specified by IELTS).

Around 20 expert informants, covering all three categories, were personally approached via email. They were invited to share their professional views and perceptions of the different accommodation types offered to IELTS test-takers, including comments on the perceived appropriateness of a given accommodation, awareness of underpinning research, the extent to which the accommodation type aligns with common practice in their field, etc.

Direct approaches were made to existing colleagues known to be working in relevant domains as well as to personnel working for a range of national disability advocacy and student support services organisations, including those located within at least one high-ranking university in each of the five key destination countries for IELTS test-takers: UK, Australia, New Zealand, USA and Canada. The aim was to sample as widely as possible across different disability-related constituencies, included those with personal lived experience.

4.1.3 Analysing the IELTS accommodations through a socio-cognitive lens

The different accommodated formats available for the four IELTS test components were also subjected to detailed analysis to discern how each format is designed to address the specific needs of a test-taker with a given disability and how this might affect any existing test validation claims for IELTS, especially with regard to construct validity. For this analytical phase, we drew upon a practical framework approach for test scrutiny and analysis developed for an earlier IELTS-related project conducted by the Centre for Research in English Language Learning and Assessment (CRELLA) (Taylor and Chan, 2015). Taylor and Chan used their framework to analyse and compare a range of high-stakes, standardised, international English language proficiency tests (including IELTS) in terms of their cognitive, contextual and other task features and demands. The tool took the form of a set of grids that allowed key cognitive and contextual characteristics of test tasks to be captured and compared in a systematic way (see Taylor and Chan (2015) (IELTS Equivalence Research Project (GMC 133) (gmc-uk.org)).

Two additional tools were used that allowed for consideration of test validity implications in cases where test design, content and delivery is adapted for use with candidates with special needs, including disabilities. The first was based upon work by Burns (1998), later adapted by Kunnan (2001) to judge the validity of a testing accommodation in terms of whether a testing accommodation might mitigate a disability (or not) and how it might risk changing the construct (or not). The second tool, based upon the work of Kormos (2021), seeks to differentiate between a testing 'accommodation' (which ideally does not impact the assessment construct or objectives) and a testing 'modification' which risks changing what the test purports to measure.

Applying the socio-cognitive framework and additional tools to the accommodated (i.e., non-standard) task formats for IELTS enabled us to see more clearly how different testing accommodations and special arrangements were being applied to the different skill components of IELTS, and across the test as a whole. We were particularly interested in how an accommodated format might affect the cognitive processing intended for a standard IELTS task, potentially leading to impact on the underlying construct validity of the task, on the test-taker performance being elicited, and therefore, on the meaning that might be attached to any score outcome. For example, adjusting the reading task format by reducing the number of texts or items, or by giving additional time for completion, may mean that the cognitive processing which the standard reading task was originally intended to provoke is affected in some way. Similarly, reducing the overall number of reading/listening texts or items may risk reducing the breadth or depth of construct representation in the Reading or Listening test.

4.2   Investigating Research Question 2 (RQ2)

RQ2 sought to elicit the attitudes, perceptions and experiences of current IELTS accommodations from a range of key stakeholders in order to hear their voices and benefit from their direct experience of developing, administering, taking or using IELTS.

We gathered relevant data via questionnaires and follow-up emails and online interviews conducted with targeted stakeholders, including:

- IELTS test developers
- IELTS test centre administrators
- IELTS speaking examiners
- IELTS test-takers
- IELTS score users.

The questions included in the questionnaires and interviews were developed and carefully checked in consultation with the relevant personnel from IELTS Partners. Due to the exploratory nature of this study, we included a number of open questions in the questionnaires in order to unearth the stakeholder views on the current practices around special arrangements (SAs) in IELTS. The following table summarises the numbers of participants from the five different stakeholder groups and the various data collection methods used with the relevant timeframes.

Table 1: *Stakeholder groups and data collection methods*

Stakeholder type	Participants	Data collected via	Timeline
Test developer	2 assessment managers in charge of producing accommodated test materials	Online interview	May 2023
Test administrator	76 test centre staff	Online questionnaire	May–June 2023
	5 test centre staff who volunteered to be interviewed	Email and online interview	July–August 2023
Examiner	438 IELTS Speaking Examiners	Online questionnaire	October–November 2023
Past test-taker	4 past candidates who took IELTS with special arrangements	Online interview	May and November 2023
Score user	2 university admission officers	Email and online interview	March 2024

Responses to the closed questions in the online questionnaires for test administrators and examiners were analysed descriptively, while responses to open questions in the questionnaires and to interview questions were analysed thematically.

4.3 Overview of complete research design for RQ1 and RQ2 including timescales

Table 2: *Research design for the study*

Research questions	Data sources	Approach to analysis	Timeline
RQ1. What types of accommodations are available in IELTS for test-takers requiring special arrangements?	• IELTS documentation (public and internal)	• Content analysis and summary overview comparing 'public' and 'private' information	• January 2022 onwards
RQ1a. How do they map to the current research literature on and policy/ practice for special educational needs?	• Relevant research literature on special educational needs • Consultation with professional experts in the field of special educational needs and disability	• Content and comparative analysis • Quantitative analysis of closed responses to highlight key issues • Qualitative analysis of free text responses to highlight key themes	• January 2022 onwards • February to March 2024
RQ1b. How do they align with current theory and best practice in language testing and assessment?	• Relevant literature on current theory and best practice in language testing • Consultation with professional experts in the field of special educational needs and disability	• Content and comparative analysis using a socio-cognitive framework supplemented with additional tools • Quantitative analysis of closed responses to highlight key issues • Qualitative analysis of free text responses to highlight key themes	• January 2022 onwards • February to March 2024
RQ2. What are various stakeholders' attitudes, perceptions and experiences of the current accommodations provided for IELTS?	• Questionnaires to range of test stakeholders (closed and open questions) • Follow-up interviews with targeted stakeholders	• Quantitative analysis of Likert scale responses to highlight key issues • Qualitative analysis of free text responses to highlight key themes • Transcription and thematic analysis to identify emerging themes	• May–June 2023 and October–November 2023 • May 2023, July-August 2023, November 2023, March 2024

5. Results and analysis

This section summarises the results from analysing all the data gathered as described in Section 4. Information on the range of IELTS accommodations and the procedures for requesting them is freely accessible to the general public via the IELTS website at IELTS | Special Requirements. This information is categorised under four broad headings:

1. visual difficulties
2. hearing and speaking difficulties
3. specific learning difficulties
4. medical condition or infant feeding.[8]

Additional information is contained in various internal and confidential proprietary documents on policy and procedures which are not available in the public domain. This latter information is not included below because it is at a fine level of administrative detail and is largely relevant (and thus restricted) to those who are tasked with practical planning and implementation of the access arrangements (i.e., test centre administrators and test supervisors).

[8] This category is not addressed in detail in this report given the project's primary focus on meeting the needs of test-takers with recognised disabilities. The most likely special arrangement for those in this 4th category would be supervised breaks. According to the internal policy guidance for IELTS, supervised breaks would generally be appropriate for those who: have difficulty concentrating for long periods of time (e.g., due to pain); have a repetitive strain injury in their writing hand; are pregnant or breast-feeding; have diabetes; suffer from panic attacks or anxiety; need frequent breaks due to a medical condition.

When requesting one or more accommodations relating to the four broad areas above, prospective test-takers are normally required to provide the local IELTS test centre where they intend to take the test with at least six weeks' notice. This is to allow plenty of time for the appropriate special arrangements to be approved and put in place at the local levels of the test centre. Applicants may also be asked to present appropriate medical or other evidence in support of their request.

The following sub-sections describe the different accommodation types provided for IELTS test-takers with visual, hearing/speaking and specific learning difficulties (i.e. categories 1 to 3 referred to above), as well as provision for the use of assistive (access) technology in IELTS.

5.1   RQ1: Accommodations for IELTS test-takers with visual difficulties

The list of accommodations for IELTS test-takers with visual difficulties includes:

- extra time: usually 25% more than the standard test time, but a longer time may be allowed depending on the severity of visual difficulties

- support with reading question papers: e.g., permission to use handheld magnifiers, screen magnification software, screen reader software, refreshable braille displays; a human reader is also possible to read and re-read the test questions

- support with writing answers: e.g., mechanical or electronic braille keyboard, computer keyboard of word processor (without spell/grammar check etc.), braille note taker, use of a human transcriber (or scribe/copier) to write/ copy answers

- braille question papers: contracted (Grade 2) Standard English Braille (SEB); uncontracted (Grade 1) Standard English Braille (SEB); Unified English Braille (UEB)

- enlarged print question papers: using the enlarged font size of 18pt bold instead of the standard 11pt; any 'visual' material not needed for answering the question is also removed

- special version of Listening test: extra time is allowed for listening to the CD; the supervisor pauses the CD before, during and after each extract to allow the test-taker to read the questions, write answers, and check answers; each extract is played twice

- special version of Speaking test: extra time can be given by the examiner for reading the test material or preparing what to say; enlarged print prompts or Speaking task cards in braille

- supervised breaks

- separate invigilation.

5.2　RQ1: Accommodations for IELTS test-takers with hearing/speaking difficulties

Accommodations for IELTS test-takers with hearing and/or speaking difficulties include:

- hearing aids: hearing aids, headphones, other devices (if wireless, individual permission is needed), special amplification system (if permitted, a separate room is necessary)

- special version of Listening test: extra time is allowed for listening to the CD; the supervisor pauses the CD before, during and after each extract to allow the test-taker to read the questions, write answers, and check answers; each extract is played twice

- hearing-impaired/lip-reading version of the Listening test: instead of playing a recording, supervisor reads out the material, reading each text twice

- extra time for Speaking test: allowed for understanding instructions and for responding

- exemptions/endorsed certificates: exemption can be given to 1 or 2 test components in case of severe hearing and/or speaking difficulties, e.g. unable to lip-read.[9]

[9] This means the test-taker does not take that part of the test(s) at all: the score for a missing section(s) is based on performance on other test sections and used to calculate the overall score; the Test Report Form (TRF) will include the following statement: 'Due to extreme speaking/ hearing (etc.) difficulties, this candidate was exempt from the Speaking/Listening (etc.) test(s). The Speaking/ Listening (etc.) test Band Score(s) has/have been notionalised on the basis of the average of the other two/ three Band Scores.'

5.3　RQ1: Accommodations for IELTS test-takers with specific learning difficulties

The accommodations available for test-takers with specific learning difficulties, and/or communication and interaction difficulties, are listed below. Specific learning difficulties are likely to include: dyslexia, dysorthographia, Autistic Spectrum Disorder, Attention Deficit Hyperactivity Disorder, Asperger Syndrome, etc. Some test-takers may request and be granted more than one of the accommodations listed below (e.g. extra time AND supervised breaks).

- extra time: usually 25%, but can be longer

- supervised breaks: taking a break alone in another room – no length is specified

- support with writing answers: using a computer (without spell checker etc.); separate room

- support with reading the question papers: a human reader or screen-reading software

- having a copier (or transcriber): if handwriting is difficult to read, answers can be dictated to a copier (including all punctuation and any mistakes)

- support with filling in answer sheets (for Reading and Listening): permission to write answers onto a separate paper or on question paper – before transfer to answer sheets

- use of transparent coloured overlays: if normally used

- enlarged print papers (Modified Large Print): all words in same print size (18pt bold Arial) on A4 pages

- special version of Listening test: extra time is allowed for listening to the CD; the supervisor pauses the CD before, during and after each extract to allow the test-taker to read the questions, write answers, and check answers; each extract is played twice

- other equipment: e.g. screen magnifier

- separate invigilation.

5.4 RQ1: Types of assistive (access) technology available to IELTS test-takers

The phrase 'assistive technology' (AT) is used to describe products or systems that support and assist individuals with disabilities, restricted mobility or other impairments to perform functions that might otherwise be difficult or impossible.[10] Assistive technology, also referred to as access technology, includes specialist equipment or devices that (i) give people with disabilities access to standard technology, or (ii) enable people with disabilities to read, write, speak or listen.

The guidance relating to IELTS suggests that an IELTS candidate will normally prefer to use their own equipment, unless a test centre has the appropriate equipment available. The test centre is responsible for checking the candidate's equipment to ensure that users are monitored before, during and after the test for security purposes, and that any test material and candidate responses are deleted after use. If provision includes use of a laptop or computer, this equipment must normally be supplied by the test centre. Candidates using assistive technology will typically be accommodated in a separate room with separate invigilation. Assistive technology options available to IELTS test-takers in 2024 include:

- screen readers
- electronic reading aids (scanners)
- screen reading pens
- screen magnifiers
- braille displays
- braille notetakers
- braille keyboards
- assistive listening devices.[11]

5.5 RQ1: Feedback from expert informants on key features of IELTS accommodations

A consultation exercise with professional experts in the field of special educational needs and disability was designed to provide a sense of how the current IELTS accommodations provision is viewed through the lens of specialists directly involved in education and advocacy for disabled adults. Over 20 expert informants (mainly UK-based) were contacted with a personal invitation to complete a specially designed online questionnaire covering 13 main IELTS accommodation types across the disability cohorts outlined above. Quantitative and qualitative questions addressed key features of the accommodations including degree of *appropriateness, accessibility,* and *perceived alignment with current research, understanding and good practice*. Six of the 20 expert informants contacted returned their questionnaire (30% response rate). All informants provided responses to the closed questions together with extensive prose comments in the open text boxes provided.

Given the relatively small cohort of expert informants (N=6), all the responses to the quantitative questions of the online questionnaire were aggregated and analysed to produce an overall picture which gave a sense of the respondents' impressions of the range of SA provisions for IELTS in terms of their *usefulness, appropriateness, evidence-based nature, accessibility* and *match to learner/student experience in the wider world*.

[10] Assistive technology: definition and safe use - GOV. UK (www.gov.uk)

[11] It is important to note that assistive (access) technology options are constantly being upgraded and improved, meaning that revised and new options may be added to this list over time.

In summary, respondents considered the range of IELTS accommodations offered to be appropriate/very appropriate (75%), to reflect good practice on the whole (71%), and to align well with what learners encounter in the world beyond the test (65%). There was a level of concern expressed that some accommodations might be challenging for some individuals (47%), though 42% of the responses expressed a degree of uncertainty in this area. Perhaps the most striking statistic suggested that respondents reported relatively little knowledge/awareness of relevant research evidence to underpin the accommodations provision. The quantitative findings were supported with extensive qualitative comments from all six respondents and this feedback was included in full as an appendix for the benefit of the IELTS partners.

The respondents' willingness to share not only their knowledge and expertise as professional educators and/or members of disability advocacy groups, but also their lived experience as individuals with their own special requirements, was both instructive and humbling.

5.6   RQ1: Impact of the test accommodation on the underlying construct of interest

A final analytical exercise for RQ1 considered each accommodation type through a socio-cognitive lens to examine it from a construct operationalisation perspective, particularly the extent to which an adjustment to the standard test format (in terms of test content, format or delivery) might risk compromising the intended or stated construct.

A previous IELTS-related research project in 2014–2015 (Taylor & Chan 2015) analysed the contextual, cognitive and scoring validity features of IELTS in its standard format. The analysis drew upon information contained in publicly available documentation issued by the IELTS test providers, supplemented with additional analysis using a socio-cognitive framework tool. This process, based on a close analysis of selected test versions for all four IELTS modules, helped to make explicit the specific cognitive operations, discourse modes and lexical levels that are typically represented in the IELTS Academic Reading, Academic Writing, Listening and Speaking tests. The outcomes of this analysis can be found in Taylor and Chan (2015).

Building on the 2015 analysis, the researchers sought to examine and evaluate more closely the nature and impact of the various adjustments or changes to the standard IELTS Academic Reading, Academic Writing, Listening and Speaking tests which are designed to make them more accessible to test-takers with specific requirements, i.e., accommodations provision. There is always a concern that changing the content, format or delivery of the standard test in some way, even when done for accessibility purposes, might lead to changes in the underlying test construct or original assessment objectives, thus creating a potential threat to test validity and score interpretation.

The socio-cognitive framework tool was combined with two other conceptual frameworks (Kunnan, 2001 and Kormos, 2021) to:

(i) judge how each testing accommodation in IELTS might mitigate a disability (or not) and how it might risk changing the construct (or not)

(ii) differentiate between a testing 'accommodation' (which ideally does not impact the construct) and a testing 'modification' which may do (Kormos, 2021).

The results of this analysis suggested that:

- for the IELTS Academic Reading Test, all the special arrangements offered can be considered as 'accommodations', with the exception of the provision for a Reader to read aloud the text, questions and answer options; the latter approach may constitute more of a 'modification' since it risks converting the test to more of a listening exercise

- for the IELTS Academic Writing Test, all the special arrangements offered can be considered as 'accommodations'

- for the IELTS Listening Test, all the special arrangements offered can be considered as 'accommodations', with the possible exception of three SAs (the braille version, the modified listening CD version and the hearing-impaired/lipreading version); the primary reason for this is that the listening extracts in these three SAs are played twice rather than once as in the standard and other SAs

- for the IELTS Speaking Test, all the special arrangements offered can be considered as 'accommodations'.

This type of analysis helps to highlight how individual accommodation types can be systematically classified: either as an 'accommodation' (in which the intended construct is preserved intact), or as a 'modification' (in which the intended construct may be 'compromised' in some way). According to traditional validation theory, modifications may entail validation implications, potentially impacting on a score outcome and its interpretation.

5.7   RQ2: Stakeholder attitudes, perceptions and experiences of IELTS accommodations

RQ2 set out to describe and analyse the views and experiences of accommodations, or 'special arrangements' (SAs), for five specific IELTS stakeholder group: test developers; test centre staff; speaking examiners; past test-takers; and score users. Data for analysis was gathered via online questionnaires (both closed and open responses) and online interviews with targeted stakeholders. This section provides a general overview of the results and findings for these five stakeholder groups.

5.7.1   IELTS test developers

Two Assessment Managers who had worked for the IELTS Partners in charge of producing test papers for special requirements for over a year (at the time of the interview) responded to questions in an online interview. One of their key responsibilities is to identify suitable test papers to transform into the different special requirement papers, thus producing different versions of the papers to match differing needs (e.g., braille, screen-reading, lip-reading versions, etc.).

Responses from the Assessment Managers highlighted various challenges and considerations relating to:

- developing test papers for the lip-reading Listening test and for the large print and screen-reading Reading test (e.g. how to manage dialogic material for Listening, and to present flowcharts and tables in large print or screen formats for Reading)

- converting chart-based information in the Writing test to a screen-reader-friendly format

- the labour-intensive nature of developing braille versions, each one requiring multiple rounds of checking for accuracy

- the importance of working with external agencies and specialists to ensure accuracy and suitability of test materials

- the growing number of requests for screen-reading test versions (rather than braille), especially in the face of differing and sometimes non-compatible software

- keeping pace with technological advances and changes in market expectations.

5.7.2   IELTS test centre staff

Seventy-six (76) test centre staff from 34 countries responded to an online questionnaire, constituting more than one in three of the British Council-managed test centres for IELTS. Among the 76 respondents, over 80% reported they had dealt with SA provision for IELTS and their number of years of experience of SA provision averaged 5.16 years (range: 0.5 to 25 years).

Respondents' job titles included, for example, Test Centre Manager, Operations Manager, Confidential Materials Room and Logistics Coordinator, Exam Coordinator, and Administrator. Collectively, their responsibilities regarding SA provision covered the full range of tasks: receiving and processing SA requests from candidates and schools; communicating internally and externally to arrange SAs; and approving, authorising, and supervising SA provision on the test day itself.

Out of 17 questionnaire respondents who voluntarily left their contact details for follow-up interviews, eight (8) were selected and contacted for follow-up based on their varying views shared in the questionnaire. Out of these, five (5) respondents completed online one-to-one interviews with a researcher, each lasting for 30 to 40 minutes.

The findings from quantitative analyses of the 76 sets of online questionnaire responses combined with qualitative analysis of the five interview transcripts raised the following points of interest:

- a good range of SAs is administered across IELTS test centres of all sizes (small, medium and large) though the overall take-up of SAs remains very small as a percentage of the total IELTS test-taker population; on average, test centres have only 3 or 4 candidates in 1,000 who request to take IELTS with some form of SA, i.e. only 0.3% of the total IELTS candidature

- the most frequently requested SAs reported were: extra time, separate invigilation, listening tests using special CD with extra pauses, enlarged print paper, supervised breaks, and the use of hearing aids; these SAs were encountered by over 50% of the questionnaire respondents

- over 40% of respondents reported experience in SAs involving assistive technology, and many commented on the growing number of requests for screen reading provision (echoing the perceptions of the test developer group).

Test centre staff respondents reported a generally positive attitude and perceptions towards the ease of application and accessibility of information regarding SA provision in IELTS, both in terms of the application process and procedures at the local test centre level and in relation to liaison with staff at the central service unit in Cambridge. Some specific concerns were raised regarding the user-friendliness of CentreNet, which is the online central system used for recording the SA request from a candidate, as well as to apply for the SAs that are provided centrally. Concerns and issues raised by local test centre staff touched upon the administrative challenges and complex decision-making that can face those handling SA requests at the local level, e.g. when determining precisely which accommodation (or set of accommodations) is needed for a given candidate, or when evaluating medical evidence provided in support of an SA request.

Some respondents also welcomed more detailed practical guidance for test centre staff in specific areas, e.g., when making decisions about accommodation options involving assistive technology.

5.7.3 IELTS Speaking test examiners

A total of 438 Speaking Examiners from 55 countries around the world responded to an online questionnaire. This cohort had examined for IELTS for an average of 9.6 years (SD = 7.2 years). Of these respondents, 277 (63.2%) said they had examined candidates with special arrangements in person, and 52 (11.9%) had done so online.

The most common conditions encountered by speaking examiners involving SAs (whether in person or online) were as follows:

- speech difficulties (due to stutter/stammer, cleft lip)

- hearing impairment

- visual impairment

- specific learning difficulties (e.g. dyslexia, ADHD)

- physical disability (e.g. cerebral palsy, paralysis).

Speaking examiners reported using a very wide range of SAs with IELTS Speaking test candidates, including giving extra time, speaking slowly and clearly, adjusting lighting for lipreading, using special equipment (headphones/hearing aids) and assistive technology (screen reader), etc. They also reported a variety of challenges and considerations when called upon to administer SAs for the IELTS Speaking test including:

- insufficient advance notice for the examiner about the test-taker's condition or SA needs

- a lack of awareness or experience of test-taker SA needs among some test centre staff

- the value of having test centre staff with a good knowledge and experience of SAs at the local level

- the importance of appropriate training for Speaking Examiners when asked to examine test-takers with special needs, including having access to recordings of candidates receiving SAs

- the importance of examiners having easy and timely access to procedural guidelines for examining candidates needing SAs

- the value of having additional guidance for examiners on certain points: giving extra time (e.g., in response to a speech impediment), assisting with the management of in-test SA procedures (e.g., use of braille task prompts) and the application of rating scales and criteria (e.g., for a candidate with a stutter).

The reactions and reflections shared by IELTS Speaking Examiners in their feedback testified to the commitment and compassion that they bring to the Speaking test to try and ensure the best experience possible for the candidates, but also their desire to learn more and to be better equipped for the complex task of examining IELTS test-takers with special needs.

5.7.4   IELTS test-takers

Four past candidates who took IELTS with SAs shared their stories via one-to-one online interviews with our researcher. Two participants were from Japan, and the other two from Pakistan. Their reasons for applying for SAs when taking IELTS were either specific learning difficulties (i.e. dyslexia, Asperger syndrome) or blindness. Although a larger group of past IELTS test-takers was actively sought by the researchers, it proved extremely difficult to identify and contact suitable candidates. Despite this, there is no doubt that each individual's experience can provide valuable insights on what it means in practice – as well as what it feels like – to request and receive SAs in the IELTS test. While the lived experience of the four IELTS test-takers shared a number of aspects in common, in other ways, it was uniquely individual. Some points worth highlighting include:

- the extent to which extra time can be helpful for some test-takers, but not for others

- the importance and impact of having test centre staff who are aware of and understand a wide range of special needs and different accommodations options

- the need for good communication between test-taker and test centre about their special needs, e.g. clarity about diagnosis, exact types of SA options required, etc.

- the potential for confusion in the information provided/received – leading to time pressure or the wrong option being available

- the value of having access to a range of assistive technology options.

5.7.5   IELTS score users

Like the community of past IELTS test-takers, this proved to be another difficult constituency to access and engage with. We aimed to recruit university admission officers (who use IELTS scores for university entry purposes) at five UK universities by emailing close colleagues and the contact email addresses for student support services (and disability support services where available on the university website). In our email communications, we outlined a series of questions we would like to ask those involved in using IELTS scores for admissions purposes. Responses were received from officers at only two of the five universities contacted; one agreed to be interviewed online by our researcher, and the other returned their response in a short email.

From the limited data gathered, these two officers reported that:

- they focus just on the scores on the IELTS score report

- it is rare for them to see score reports with mentions of exemptions

- in addition to their own role, there are broader, dedicated support teams for applicants with disabilities and learning difficulties, including those who take IELTS with SAs, to contact at the entry point and onwards.

The communications with IELTS score users attempted in this study revealed that exploring the processes and consideration during university admission (and afterwards) for candidates who take IELTS with SAs may require a separate, more focused research project with cooperation from the university/ies, relevant teams within it/them, and from the students themselves.

6.   Discussion of findings

This section of the report briefly reflects upon the overview of results and analysis presented in Section 5 above. It highlights and discusses some of the key issues raised through the various investigations conducted for the study, structured around the findings that emerged from the two main research questions. The more general discussion prompted by investigating RQ1 (i.e., a descriptive analysis and review of current IELTS accommodations provision) is complemented, and often corroborated, by the specific points for discussion that arose from exploring RQ2 (i.e., gathering IELTS stakeholder attitudes, perceptions and experiences).[12]

The study's findings are summarised under Sections 6.1 to 6.4 below.

6.1   The nature and quality of information on IELTS special arrangements (SAs) for different stakeholders (RQ1)

The extensive range of SAs now being offered to those with special needs who wish to take the IELTS test is impressive. Considerable efforts are made on the part of the test providers to invest the necessary time and resources in appropriate SA provision and to communicate the list of options available to all test stakeholders. Stakeholders include both those who might be said to make up the IELTS 'customer base' (e.g., test-takers, teachers, parents, educational authorities), but also those who have a more instrumental or professional relationship with the IELTS test (e.g., test writers, test centre personnel, test examiners).

Different stakeholder groups, or audiences, understandably need different levels and types of printed or electronic information about the range of SA options; some documentation will be designed for general consumption in the public domain, while other material will be proprietary, intended primarily for internal and restricted use, and often confidential as a result. The requirement for different communication tools designed for different audiences entails complex decisions about what content should be included in which publication venue, as well as the need to ensure consistency across multiple venues and the importance of ensuring that all material is kept accurate and up-to-date to avoid omission or confusion.

Offering guidance in the public domain explaining more fully why certain accommodations can be helpful and what sort of special needs they are designed to meet might be more informative than simply listing on the IELTS website the many different sorts of accommodation available as is currently the case, though with little accompanying guidance or advice on the perceived benefits of each accommodation type. Similarly, explaining why certain accommodations are considered NOT acceptable could be helpful for both internal and external audiences.

The SA provision involving assistive (access) technology seems to be the most complex and, sometimes confusing, area to navigate not just for potential IELTS test-takers – in terms of what they are or are not permitted to use during the test, but also for test centre staff – in terms of how best to source and manage onsite the specialised technology that is requested or required. In the context of a test of English language proficiency like IELTS, the rationale for certain restrictions may be self-evident, e.g., test security issues concerning use of handheld devices or internet access, and non-access to language support functions such as spelling and grammar checkers in a language proficiency test. Other restrictions in both the internal or public-facing documentation may benefit from additional explanation or justification.

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[12] The full report of the study includes extensive quantitative and qualitative analyses of the data gathered, including numerous anonymised excerpts from the interview transcripts. These are not included in this abridged version for reasons of space and also because they are primarily designed to provide specific insights and practical feedback for internal IELTS-related staff and departments at Cambridge and the British Council.
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At a more general level, the discussion above raises some interesting questions concerning the nature of construct definition and operationalisation in language testing in a digital age. As Taylor and Banerjee (2023) pointed out, rapid technological advances in recent decades have led to changes in interactional norms and conventions, allowing for the blending of speech and writing, as well as the growing use of multimedia and multimodal approaches in human communication. This raises challenges for test designers given that the field of language assessment remains wedded to a traditional, four-skills approach of testing reading, writing, listening and speaking, using largely discrete test papers that are also named as such, i.e., Reading, Listening, etc. Despite some movement towards assessing integrated skills, e.g., Reading-into-Writing, or Listening-into-Speaking, this approach remains the case for many English language proficiency tests, including IELTS.[13]

[13] It is perhaps ironic to recall that IELTS in the 1980/90s (and its predecessor ELTs) incorporated integrated skills assessment by closely linking some tasks across the reading, writing and speaking subtests (Davies, 2008).

Technological advances have also broadened the range of specialist equipment and electronic devices available for all language learners and users to communicate more readily and participate more fully, making communication and interaction even more blended and multimodal at times. Universal tools in word processing packages support all writers when they are composing text, and on-screen captioning can make video footage more accessible for everyone. While such developments are helpful for all language users, they can be especially relevant and useful for language learners and users with disabilities. Visually impaired or blind people often read by using an e-reader (text-to-speech), and those with impaired hearing may routinely listen using speech-to-text software, both tools that are now readily available in a digital world.

Language test providers, however, are still inclined to take the view that such technology (i.e., e-readers) risks distorting or compromising the 'reading/listening construct' as it has traditionally been understood, and is therefore not acceptable on grounds of construct irrelevance or under-representation. As a result, a blind test-taker who elects to use a screen reader for the reading texts in the IELTS Reading test will have their Test Report Form (TRF) endorsed to indicate that the full range of assessment objectives was not satisfied. The argument, of course, is that use of a screen reader means they are no longer 'reading' but 'listening'. (A similar argument could be made about the use of voice recognition software in a listening test which would convert the spoken signal to readable text, e.g., using on-screen captioning, though this provision is currently not permitted for IELTS.) According to traditional theory and practice, this results in 'reading' rather than the intended 'listening' activity. In today's digital communication world, this view risks becoming an increasingly narrow and out-of-date perspective on the reading or listening comprehension constructs. Many people, not only those with disabilities, now choose to access information and entertainment via print, audio and audio-visual media using text-to-speech and speech-to-text/image software, sometimes simultaneously. It may therefore be time for test designers to rethink the usual approach to test construction definition and operationalisation, either by broadening the current definitions of 'reading' and 'listening' to include 'text processing' processes now widely used by the general population for consuming print/audio media, or by renaming the construct entirely to something like 'consumption/processing/comprehension of print/audio media'.

We might also speculate whether, in the future, innovative language assessment tasks and formats should be developed to reflect more closely the everyday access that most language users have to the standard or universal tools that are now routinely provided in word-processing packages (e.g., grammar/spell checkers, highlighters, etc.), as well as to information sources such as the internet. How tasks in a language proficiency test reflect what actually happens in the world beyond the test remains a crucial validation consideration, especially as language use in the wider world tends to change much faster than what can be practically included in a language test.

Over a decade ago, Douglas (2013) encouraged test developers to define the language construct to include appropriate technology in light of target situation and test purpose. More recently, Khabbazbashi, Chan and Clark (2023) noted the increasing use of digital technologies in higher education, advocating the inclusion of technology-based multimodal communication in assessing English for Academic Purposes (EAP). This suggests a continuing evolution in approaches to assessing language for educational and professional purpose, leading to changes in future assessment design which may mean that test tasks align more closely with what language learners with disabilities and special needs already experience as routine practice in their daily use.

In addition, the increasingly widespread access to, and use of, Artificial Intelligence (AI) is complicating matters even further! Consideration is already being given to applications of AI in language testing and assessment with regard to construct definition – see, for example, Aryadoust (2023), Burton (2023) and Isaacs et al (2023). It will be interesting to see how AI applications might impact on aspects of test design and delivery for test-takers requiring accommodations. They may be able to offer certain affordances (e.g., through automated task generation or scoring mechanisms) that will improve access and fitness for purpose when assessing the language skills of candidates with disabilities and special needs.

As the range and sophistication of assistive technology devices continues to develop apace, it can be difficult for test providers to keep up with the latest technology and to know how best to respond to requests from candidates wishing to use the AT to which they have routine access on a daily basis or with which they are most familiar. When responding to requests to use AT with certain test materials, test providers understandably need to evaluate the extent to which use of a particular device risks compromising the stated assessment objectives of the test (though note concerns over contemporary construct definition highlighted in the previous paragraphs). Alongside this more general issue, the internal proprietary documentation for IELTS highlighted the significant practical and financial demands that the provision of assistive technology can place upon local test centres and their personnel (i.e., test centre administrators, invigilators, speaking examiners). Such considerations include: ensuring test security; additional administration time required – before, after and during the test; and additional costs involved in hiring specialist equipment and personnel, which can be considerable. Evidence required in support of an SA application clearly presents a particular administrative challenge for the test provider at both local and central level: e.g., determining the degree of a disability (mild/severe); having access to diagnostic results from recognised tests/authorities (especially where approaches to diagnosis differ across international jurisdictions); establishing the 'shelf-life' of a formal diagnosis; etc.

Despite the additional administrative and financial burdens that may be incurred, test providers are ethically obligated to safeguard equity, diversity and inclusion (EDI), especially for test-takers with special requirements. This study highlights the considerable efforts to ensure this is the case for IELTS. The commitment of the IELTS Partners to EDI is not in question, but our analysis and review raise some interesting questions over the current clarity and sufficiency of communication with stakeholders, and the potential for improving this. For example, policy decisions about 'acceptable' and 'unacceptable' accommodations for certain test-taker groups could be more fully explained and also justified, both internally and in the public domain, perhaps with specific reference to current research and good practice in the wider disability community or literature.

We found it surprising that neither the public website nor the internal documentation makes any explicit reference to how the IELTS Partners have determined their policy and procedures concerning special arrangements provision for IELTS, or how these are kept under review and up-to-date as knowledge and understanding develop in the field, especially with regard to advances in assistive (access) technology. For example, there is no explicit mention of the IELTS Partners working with disability advocacy organisations or experts in special educational needs and disability (SEND) to develop the SAs for IELTS, nor of research or impact studies conducted to investigate the effectiveness of the SA provision offered. Nor is there any mention of routinely consulting with, and seeking direct feedback from, test-takers who make use of the IELTS SAs, e.g., through an impact study, though we know that some work of this nature has been done in the past (e.g., Taylor & Khalifa, 2013). Systematically drawing on insights from test-taker experience to feed into future test development could be extremely valuable.

We therefore suggest that the IELTS test providers would benefit from engaging in a much richer communication exercise with relevant stakeholder constituencies. The funding of this current project is, of course, a good start and constitutes a positive response to the call by Chalhoub-Deville and O'Sullivan (2020) for greater attention to be given to the considerations of stakeholders and the tailoring of communication to engage intended groups. Chalhoub-Deville and O'Sullivan envision validity scholarship to attend to test consequences at the individual, aggregate/group, and larger educational/ organisational/societal level. Giving greater profile to this approach in both internal and publicly-facing documentation for IELTS SAs would not only yield a more convincing validation argument for IELTS, but also contribute to the broader discussion of EDI issues and priorities in the language assessment field as part of a commitment to social justice. From a purely public relations and promotional perspective, it might also enable the IELTS test providers to capitalise more effectively on the considerable investment they already make in this area and thus position themselves as leaders in the field.

6.2 Alignment of IELTS accommodations with current research, understanding and practice (RQ1)

The consultation exercise undertaken with professional experts in the field of special educational needs and disability provided us with a sense of how the current IELTS accommodations provision is viewed from the perspective of specialists who are directly involved in education and advocacy for disabled adults. The questionnaire feedback and comments of the six expert informants on the 13 IELTS accommodation types gave us valuable insights into how well they considered each type to align with current research, understanding and good practice.

The importance of hearing the voices of those who are directly impacted by disability-related policy and practice cannot be underestimated in language test design and delivery, research and validation. It is notable that one of our respondents was formerly a research scientist and STEM educator for over 20 years, with personal lived experience of neurodiversity and also professional experience of 1:1 support for students with SpLDs. Now living with severe disability, including motor limitations resulting from advanced motor neurone disease, this individual generously gave a whole day of their time to complete our online questionnaire precisely because they regarded the exercise as so important and felt they had something valuable they wished to share with us. It was a timely reminder of the oft-quoted maxim associated with disability and other types of advocacy: *nothing about us without us*.

The feedback from the six expert informants provided a rich source of material addressing a range of issues for each of the 13 current IELTS accommodation types, informed by their professional expertise and their lived experience. Their extensive qualitative feedback (anonymised) is included in full in the internal report and is well worth discussing and reflecting upon internally by those in the IELTS organisation who are directly involved in designing and delivering the SA provision for the test. Comments or concerns raised by the six respondents in their qualitative responses complemented the results from aggregating their quantitative responses across the 13 accommodation types.

Responses concerning the *appropriateness* of particular accommodation types were encouraging, indicating a high level of support for and satisfaction with the current IELTS SA provision. Giving additional time and use of coloured backgrounds were highlighted as specific examples of appropriateness. Their responses also largely confirmed the 13 accommodation types as *reflecting good practice* in the field (over 70%), though a quarter of the responses indicated a possible lack of knowledge or opinion on this point. This could be taken as another encouraging indication that the IELTS SA provision matches quite well to what is seen by disability experts as good practice in education and society, while at the same time recognising certain limitations. The provision of a specially-modified listening CD, the use of a scribe and the real-aloud provision were singled out as examples of good practice.

However, on the question of whether the 13 accommodation types for IELTS were *underpinned by research evidence*, around two-thirds of responses fell into the neutral/ not sure category. This finding might suggest that there exists an absence of research in this area to underpin decisions about accommodations policy and practice, or perhaps that what research does exist is inconclusive or not easily accessible to practitioners. By way of example, the prose extracts highlighted the inconclusive nature of research on use of coloured backgrounds/screens and also on additional time. (See Taylor and Banerjee (2023) for discussion of the challenges involved in developing a research-informed evidence base for test design as far as testing accommodations are concerned.)

Almost half of the responses reflected the view that some testing accommodations can *present challenges for learners/students*. A similar number of responses indicated no knowledge or opinion, while only 10% indicated confidence that they presented no challenges. Supplementary comments from the expert informants suggested this may be due to the fact that test-takers with disabilities are simply not homogeneous cohorts; what is offered as a provision to meet a special need for a specific group (e.g., those with visual impairment or an SpLD) may in fact still present certain challenges to individual candidates within that group. The prose extracts highlighted how this can be the case for accommodations such as additional time, amplification technology and font size – 'one size' certainly does not fit all!

Around two-thirds of the responses pointed to a *likely match between the accommodation types and learner/student experience in the world* beyond the test. Once again, this is a fairly encouraging finding for the test designers, suggesting that, to some degree at least, positive alignment is perceived to exist between the accommodation types offered and what language users actually experience in their life beyond the test. Expert informants were also realistic, however, about the 'real world' not always being ready to accommodate to language users with disabilities.

6.3 Considering the IELTS accommodations from a socio-cognitive perspective (RQ1)

The application of the socio-cognitive framework tools to the 13 accommodation types provided us with an analysis of the IELTS SA provision from a different, construct-focused perspective. Using an approach drawing on frameworks developed by Taylor and Chan (2015), Kunnan (2001) and Kormos (2021), we judged most of the accommodation types for the IELTS Academic Reading, Academic Writing, Listening and Speaking modules to meet the requirements for an 'accommodation', meaning that changes made to the standard IELTS test content, format or delivery help to mitigate the disability (or special need) but do not risk compromising the intended or stated test construct for assessing these skills. In a small number of cases, however, the SA may be better classified as a 'modification'. This is because, although the SA mitigates the disability (or special need), the match to the intended construct and how it is typically assessed is sufficiently reduced to make a potentially significant difference to score reporting and interpretation.

For the Academic Reading module, the use of screen reading software by a test-taker to convert the Reading module texts to speech clearly changes the task from a 'reading' to a 'listening' test, meaning that it is no longer really in line with the construct of reading as it is understood to underpin the IELTS test. The same is true if a human reader reads aloud the Reading texts. Strictly speaking, this makes the adapted format of the Academic Reading test a modification rather than an accommodation, and it triggers a comment on the Test Report Form (TRF) to ensure appropriate score interpretation.

For Academic Writing, all the SAs can be classified as accommodations, mitigating disability without apparently compromising the way the skill is being measured.

For the Listening module, it could be argued that using a specially modified listening test CD is a modification rather than an accommodation because the listening texts are all played twice (instead of the standard single-play). The same classification could be applied to the hearing impaired/lipreading version where the Listening test material is read aloud twice by test centre staff; it also covers only 3 not all 4 Listening sections from the standard test. The first issue here concerns whether double-play rather than single-play constitutes a significant shift in test construct, and views may differ here on the impact of single or double play (Field, 2023). The second issue – at least in the hearing impaired/lipreading version – concerns the fact that the construct coverage in the Listening test is being narrowed because it now includes 3 rather than 4 pieces of listening, all monologic instead of a mix of monologic and dialogic as in the standard IELTS format. Of course, the reduction also helps to avoid the Listening test becoming too long, with the potential for test-taker fatigue.

For Speaking, all the SAs can be classified as accommodations, with the exception of Exemption from the Speaking test altogether.[14] In the case of Exemption, IELTS test results will be issued as normal but the IELTS Test Report Form (TRF) will contain a version of the following statement in the Administrator Comments box: 'This test-taker has had their [Listening/Speaking] test Band Score[s] notionalised on the basis of the average of the other [two/three] Band Scores to accommodate an approved exemption'. Although this arrangement clearly mitigates the impact of severe disability for some test-takers, it also significantly affects the construct coverage across the IELTS test as a whole (i.e., one or two test components are entirely 'missing'). The test providers' ethical responsibility naturally requires that this is made clear for those who may need to interpret the IELTS test results at the level of the overall band score.

[14] If a test-taker has an approved exemption, they are given a Speaking test band score notionalised on the basis of the other 2/3 band scores. The same procedure applies if the test-taker is exempted from the Listening test.

This is a difficult position to hold – seeking to balance EDI considerations for the individual test-taker with EDI concerns for other test stakeholders, particularly score users such as university admission personnel. It can also be affected by the regulatory jurisdiction in which the test is being marketed; some parts of the world may prohibit 'flagging' on test certificates, while others do not. This dilemma helpfully illustrates the multiple and complex considerations that need to be balanced against one another when providing testing accommodations.

6.4   Enhancing support around SAs for stakeholders (RQ2)

The outcomes of analyses for RQ2 highlighted the benefit of enhancing the existing support in place for different test stakeholder constituencies, specifically test developers (i.e., assessment managers), test centre staff and Speaking Examiners.

For IELTS test developers this included:

- increased training and familarisation with the growing range of screen-reading software options available.

For IELTS test centre staff this included:

- better advertising in the public domain of the range of SAs offered for IELTS, i.e. for test-takers, teachers, etc.
- improved online access for prospective test-takers seeking IELTS SAs, e.g., translation options in a local language, having a search bar or drop-down menu, to make navigating SA pages easier on the IELTS website
- improvements to the central CentreNet system with respect to SA management, together with additional training and guidelines on SAs for local test centre staff
- timely delivery of SA test materials in some regions
- improved efficiency of communication between IELTS Central Unit, local test centres and test-takers, especially concerning complex SA requests
- increased training and familiarisation with the growing range of screen-reading software options available
- increased guidance and training on how to check the specific needs of candidates and how to prepare for each SA on the day of the test (or before)
- a review of how best to manage the (sometimes considerable) costs of SA administration, currently borne by the local (mainly large) test centres
- a review of the SA policy as it concerns (varies across) paper-based and computer-delivered IELTS.

For IELTS Speaking Examiners this included:

- more encouragement to IELTS test-takers to disclose/notify any speech difficulties they have in advance of the test
- improved communication between test centre and examiners to ensure that the latter are informed well in advance about any candidates requiring SAs
- more detailed and accessible guidance for examiners on SAs and typical conditions for which SAs are applied/approved
- more training on SAs and how to assess candidates with special needs, especially those with speech difficulties, e.g. sample videos with discussion of performance ratings
- a review of the SA policy as it concerns (varies across) paper-based and computer-based delivery modes for IELTS.

Discussion of the study's findings led to a set of tentative recommendations for the IELTS Partners to consider, and these are summarised in Section 7. The hope is that the discussion above, together with the suggestions for future consideration and possible action outlined in Section 7, can help strengthen the validation claims for IELTS in respect of the test providers' commitment to equity, diversity and inclusion, and also highlight potential directions in relation to future IELTS test development and validation activity.

7.   Conclusions and recommendations

Based on the study's findings, a list of 22 specific recommendations for the IELTS Partners was drawn up. These are grouped below according to four broad areas of focus for consideration and potential follow-up by the IELTS Partners.

7.1   Enhance public stakeholder information on IELTS special arrangements

- Undertake a review and update of all current internal and public-facing information on IELTS SAs.

- Consider extending or amplifying documentation where appropriate, especially public-facing information.

- Engage in regular, targeted and systematic consultation with key public stakeholder groups involved in SAs.

- Develop a strong public and professional profile surrounding the IELTS SA provision as an inherent and integral part of the overall IELTS validation argument.

7.2   Alignment of IELTS SAs with current understanding, research and practice

- Give careful consideration to emerging challenges relating to construct definition and operationalisation in light of the increasingly integrated, multimodal use of language in today's digital era, especially as this relates to test-takers with disabilities and special needs.

- Read carefully through the individual responses from the six expert informants to draw out detailed information, insights, references, concerns, etc. that could help to inform IELTS SA policy and practice going forward.

- Engage regularly and systematically with professional experts in the field of special educational needs and disability to keep abreast of changing policy and practice. Consider setting up a small consultative/advisory board (e.g., academic researchers, representatives of key disability advocacy groups – including those with personal lived experience, etc.) to monitor and advise on future developments in IELTS SA provision. Make this communicative engagement explicit in public-facing information on SA provision.

- Engage in (i.e., undertake or fund) further validation-oriented research in connection with IELTS SA provision, especially impact-related studies with test-takers receiving accommodations. This could make further use of some of the research instruments specifically developed for this study.

7.3   Reviewing IELTS SAs through a socio-cognitive lens

- Review the current policy and practice relating to SA provision for the Academic Reading module, particularly the restriction on use of screen reading software and a human reader. Consider how the test score reporting for the current arrangement, i.e., a comment on the TRF, might be improved to provide more useful information for score users. Also consider how the construct of 'text processing/comprehension' might be better articulated and/or developed in future to avoid the need for 'modification'.

- Review the current policy and practice relating to SA provision for the Listening module, particularly as it relates to the double-play arrangement for the modified listening CD and the hearing-impaired/lip-reading version. Consider how to better articulate justification for the practice of double-play, and consider how the issue of listening construct definition and coverage might be better addressed.

7.4   Enhance internal systems, processes, documentation, training, etc. for IELTS special arrangements

- Install screen-reading software for SA test development.

- Improve accessibility, comprehensibility and navigability of webpages for SA application procedures.

- Review and clarify some of the procedures within the CentreNet system.

- Review communication and processes between test centres, candidates and IELTS Partners to ensure a smooth and timely exchange of information.

- Explore how screen reading software could be introduced to more test centres.

- Provide enhanced guidance and training on SAs for test centre staff.

- Review the current situation regarding cost burden for SAs on test centres.

- Review procedures to ensure that Speaking Examiners are made aware of candidates who require SAs asap.

- Provide more comprehensive, detailed and accessible training on SAs to Speaking Examiners.

- Engage in full discussion and informed decision-making with experts on how best to assess the candidates with speech difficulties.

- Review the current system where different test delivery modes have different SAs that can be offered.

As researchers, we commend the IELTS Partners for being willing to fund a research study to review and audit the IELTS SA provision and we are grateful for the trust placed in us as researchers to undertake such an investigation. Our hope is that the outcomes from this exercise will help to underpin the broader test validation enterprise for IELTS, as well as identify issues and avenues for further consideration and possible future test development. This may be especially helpful and relevant as interest grows among test-takers with special needs wishing to access online and digital versions of IELTS.

We consider one of the greatest strengths of our research study to be the incorporation of elements of community-based participatory research (CBPR), a methodology which allows the voices of different key stakeholder communities to be attended to, and thus more easily heard. Such voices include not just those of researchers, professionals, expert practitioners and others, but also those whose voices can sometimes be marginalised or disempowered because they are positioned at the end of a 'processing chain' or because they are on the 'receiving end' of someone else's initiative.

The slogan, *nothing about us without us*, is now widely recognised to communicate the idea that no policy or practice should be decided without the full and direct participation of members of the group(s) affected by that policy or practice. Our hope is that our research study will make a positive contribution in this regard.

References

ALTE. (2020). *Principles of Good Practice*. ALTE Principles book.

Aryadoust, V. (2023). The vexing problem of validity and the future of second language assessment. *Language Testing*, 40(1), 8–14. https://doi.org/10.1177/02655322221125204

British Council. (2022). *The equality, diversity and inclusion (EDI) policy for test content creation and product quality review*. British Council Global Assessments. the_equality_diversity_and_inclusion_edi_policy_for_test_content_creation_and_product_quality_review.pdf (britishcouncil.org)

Burns, E. (1998). *Test accommodations for students with disabilities*. Charles C. Thomas Pub Ltd.

Burton, J. D. (2023). Reflections on the past and future of language testing and assessment: An emerging scholar's perspective. *Language Testing*, 40(1), 24–30. https://doi.org/10.1177/02655322221126607

Case, B. (2003/2008). Universal design. *Policy Report*, Pearson Education, Inc. Retrieved 31 July 2022 from: Universal Design (pearsonassessments.com)

Chalhoub-Deville, M., & O'Sullivan, B. (2020). *Validity: Theoretical developments and integrated arguments*. Equinox Publishing Ltd.

Chapelle, C. (2012). Validity argument for language assessment: The framework is simple... *Language Testing,* 29(1), 19–27. https://doi.org/10.1177/0265532211417

Chapelle, C. (2020). *Argument-based validation in testing and assessment*. SAGE.

Douglas, D. (2013). Technology and language testing. In C. A. Chapelle (ed), *The Encyclopedia of Applied Linguistics*. Wiley-Blackwell.

Field, J. (2023). *Insights into assessing academic listening: The case of IELTS*. Cambridge University Press.

International Language Testing Association (ILTA). (2000/2018). *ILTA Code of Ethics.* Available online: www.iltaonline.com/page/CodeofEthics

International Language Testing Association (ILTA). (2007/2020). I*LTA Guidelines for Good Practice in English*. Available online: www.iltaonline.com/page/ILTAGuidelinesforPractice

International Dyslexia Association. (2012). *Dyslexia basics*. https://dyslexiaida.org/dyslexia-basics-2/

Isaacs, T., Hu, R., Trenkic, D., & Varga, J. (2023). Examining the predictive validity of the Duolingo English Test: Evidence from a major UK university. *Language Testing*, 40(3), 748–770. https://doi.org/10.1177/02655322231158550

Kane, M. T. (1992). An argument-based approach to validity. *Psychological Bulletin*, 112(3), 527–535. https://doi.org/10.1037/0033-2909.112.3.527

Kane, M. T. (2013). Validating the interpretations and uses of test scores. *Journal of Educational Measurement*, 50(1), 1–73. https://doi.org/10.1111/jedm.12000

Khabbazbashi, N., Chan, S., & Clark, T. (2023). Towards the new construct of academic English in the digital age. *ELT Journal,* 77(2), 207–2016. https://doi.org/10.1093/elt/ccac010

Kormos, J. (2021). *Promoting fairness and accessibility in language assessment for candidates with specific learning differences.* Presentation given at the IATEFL TEASIG online pre-conference event, 18 June 2021.

Kormos, J., & Taylor, L. (2021). Testing the L2 of learners with specific learning differences. In P. Winke and T. Brunfaut (eds), *The Routledge Handbook of SLA and Language Testing*, pp. 413–421. Routledge.

Kunnan, A. J. (2001). *Test accommodations*. Internal report submitted to the University of Cambridge Local Examinations Syndicate.

Kunnan, A. J. (2004). Test fairness. In M. Milanovic & C. Weir (eds.), *European language testing in a global context,* pp. 27–48. Cambridge University Press.

Kunnan, A. J. (2008). Towards a model of test evaluation: Using the Test Fairness and Wider Context frameworks. In L. Taylor & C. Weir (eds.), *Multilingualism and assessment: Achieving transparency, assuring quality, sustaining diversity*, pp. 229–251. Cambridge University Press.

Kunnan, A. J. (2018). *Evaluating language assessments*. Routledge.

O'Sullivan, B., & Weir, C. J. (2011). Test development and validation. In B. O'Sullivan (ed), *Language Testing: Theories and Practices,* pp. 13–32. Palgrave.

Shaw, S. D., & Weir, C. J. (2007). *Examining writing: research and practice in assessing second language writing*. Cambridge University Press.

Sireci, S. G., Scarpati, S. E., & Li, S. (2005). Test accommodations for students with disabilities: An analysis of the interaction hypothesis. *Review of Educational Research,* 75, 457–490. https://doi.org/10.3102/00346543075004457

Taylor, L., & Banerjee, J. (2023). Accommodations in language testing and assessment: Safeguarding equity, access, and inclusion. *Language Testing*, 40(4), 847–855. Accommodations in language testing and assessment: Safeguarding equity, access, and inclusion (sagepub.com)

Taylor, L., & Chan, S. (2015). *IELTS Equivalence Research Project* (GM133), Final Report. Available online: www.gmc-uk.org/-/media/documents/GMC_Final_Report___Main_report__extended___Final__13May2015.pdf_63506590.pdf

Taylor, L., & Khalifa, H. (2013). Assessing students with disabilities: Voices from the stakeholder community. In D. Tsagari & G. Spanoudis (eds), *Assessing L2 Students with learning and other disabilities,* pp. 229–251. Cambridge Scholars Press.

Trinity College London. (n.d.). *Fairness and bias guidance*, Internal Policy Document, London, UK: Trinity College London.

Weir, C. J. (2005). *Language testing and validation: an evidence-based approach*. Palgrave.