Submission No. 154 (Overseas Trained Doctors Date: 1/08/2011



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Submission to the Standing Committee on Health and Ageing inquiry into the registration processes and support for Overseas Trained Doctors (OTDs) from The Occupational English Test (OET) Centre

Executive Summary

- The Occupational English Test (OET) is a professionally operated and internationally respected testing instrument, designed explicitly to measure the work-related language proficiency of health practitioners. It is a highly valid, reliable and well-researched language test which employs maximally defensible procedures surrounding assessment, test security and score generation.
- 2. The Occupational English Test (OET) Centre holds the interests of patients and patient safety in the Australian community at the core of its responsibility. It is aware of the importance of language proficiency as a component in the overall provision of patient care and fulfils its wider social obligation to provide accurate assessment of overseas-trained health practitioners with diligence, rigour and integrity. The quality control procedures implemented at each stage of the test design, administration and scoring process ensure that this instrument is extremely well suited to the purpose for which it is used.
- 3. The policies relating to the language requirements for overseas trained health practitioners, including the settings of standards of satisfactory performance, the duration of currency of test results and rules governing the sitting of individual sub-tests of the Occupational English Test, are **NOT** set by the Occupational English Test (OET) Centre. They are set by the relevant governing bodies representing the individual health professions for whom language testing is a mandatory step in the registration process; in the case of Overseas Trained Doctors (OTDs), this body is the Medical Board of Australia.

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Dear Minister and Committee Members,

The Occupational English Test (OET) Centre has been closely monitoring the House of Representatives Standing Committee on Health and Ageing inquiry into the registration processes and support for Overseas Trained Doctors (OTDs). The OET Centre welcomes the opportunity to provide a submission to the committee.

Background to the Occupational English Test

In order to be licensed to practise in Australia, health practitioners have to demonstrate that their English language proficiency meets certain standards. The Occupational English Test (OET) is an English language test designed specifically to assess the skills of foreign-trained health practitioners wishing to practise in Australia. It was developed expressly for this purpose in the mid-1980s, under contract to the Australian Federal Government, by (now) Professor Tim McNamara of the University of Melbourne.

The OET is owned and administered by the Melbourne-based Centre for Adult Education (CAE). CAE was founded in 1947 as the Council of Adult Education under Victorian legislation, with the broad charter to provide adult education to the Melbourne community. In 2001, Victorian Parliament passed an amendment to the Adult Community and Further Education Act 1991 which established CAE as an Adult Education Institution (AEI) to be known as the Centre for Adult Education (CAE). With reporting responsibility to the Adult Community and Further Education (ACFE) Board and the Victorian Parliament, CAE is now legislated under the Education and Training Reform Act (2006).

Development, administration and assessment of the OET are managed by the OET Centre, a CAE business unit operated by language testing and operational specialists with many years' experience in the administration and assessment of high-stakes tests such as the OET. The Language Testing Research Centre, a specialist academic unit in the School of Languages and Linguistics at the University of Melbourne, supports the OET through the development and trialling of test materials and by providing post-administration analysis of all test data.

The OET is administered up to ten times a year in major cities in Australia and around the world and is recognised by twelve Australian health and allied health professions, with nurses and doctors forming the largest test taker groups. The OET assesses the English-



language skills of these professions in four areas: Listening, Reading, Writing and Speaking. The Listening and Reading sections of the OET are on general health topics, while the Writing and Speaking sections are specific to each profession tested. The OET was developed with a focus on the ability to communicate in the workplace. Test specifications reflect common language demands on health practitioners in their working environment.

Rules governing the language requirements for Overseas Trained Doctors (OTDs)

A theme in some submissions to the inquiry concerns policies surrounding the *currency period* for test scores and the circumstances under which such scores must be obtained. Some of the criticism points to a perceived absence of fairness and transparency from the OET Centre.

The OET Centre wishes to clarify unequivocally that:

- The two year period for OET results to be considered valid is determined by the authorities who recognise the test - it is not a policy of the OET Centre. The OET Centre securely stores written responses and recordings for test takers for two years for the purpose of verification as required.
- 2. It is the policy of boards and councils (both those represented by AHPRA and those not) that test takers must achieve the requisite grades for each sub-test of the OET in *one sitting*. This is *not* a policy prescribed by the OET Centre and the administrative and test taker application systems of the OET Centre are designed to allow test takers to take any combination of one to four sub-tests at a single sitting (apart from their initial application).

The OET Centre has consistently held the position that these requirements are *not well-supported* in the research literature in language testing and second language acquisition, with regard to language loss, and has consistently argued that it is unfair to require test takers to re-test in skills in which they have already obtained a result meeting the required standard. Test takers, who, for example, do not succeed in a particular sub-test at one administration, are currently required to re-sit *all four* sub-tests, with no recognition of earlier success. The OET Centre's position is that it is better to encourage test takers to focus on improving the skills they are weaker in, *rather than to test them repeatedly* in areas where they have already achieved a satisfactory level of competence.

Furthermore, it is the OET Centre's view, supported in the academic literature on language acquisition, that a two-year score validity is unduly *conservative* in the case of high-proficiency test takers (i.e., those who obtain the required standard of OET Grade A or B).



The criticism directed towards the OET Centre is misplaced in this regard and it is the OET Centre's strong recommendation that the regulatory authorities provide a detailed explanation and rationale to test takers and stakeholders for their policy. Such an explanation might help to placate test takers, many of whom currently direct their anger and frustration at the OET Centre.

Test takers who obtain different scores at different administrations

The inquiry has received submissions relating instances in which test takers have sat for the OET on more than one occasion because the requirement for four Grades (A or B) to be obtained in a single sitting has not been met. A minority of test takers have then, on a subsequent attempt, achieved the desired result for the sub-test for which they had previously *not* met the standard, only to find that they received a lower, unsatisfactory score for the sub-test that had previously met the standard.

The sense of frustration and disappointment that such circumstances can create is understandable. Some submissions, however, erroneously suggest that the OET Centre has deliberately manipulated results so as to compel test takers to re-sit on multiple occasions.

In the first instance, the OET Centre must reiterate to test takers that the policies stating that results must be obtained at a single sitting are *not* those set by the OET Centre. Nevertheless, questions have been raised in submissions to the inquiry about the circumstances in which scores can differ between sittings. There has been the unwarranted inference that there are weaknesses in OET assessment procedures.

The OET Centre exercises stringent measures to reduce sources of variation in test scores, and represents best international practice in its methods. These include:

- the routine use of two raters for the productive skills (Speaking and Writing),
- double (and sometimes third) markings of Listening and Reading papers (where scores fall close to the cut-scores between overall bands at the critical B/C boundary) and,
- sophisticated statistical procedures to adjust for difference in rater severity/leniency.

Furthermore, raters are required to attend annual standardisation training sessions and a report is produced for each administration of the test by the Language Testing Research Centre (LTRC) that profiles each rater's reliability, overall consistency and overall severity/leniency patterns.



The OET Centre conducts routine investigations of test scores at every step in the assessment process. This includes checking patterns of results to ensure that any unusual score profiles are not due to data entry or administrative error.

The OET Centre receives and records data on the consistency or scoring of test items and rater performance (referred to as reliability). The LTRC report produced after each OET administration also contains summary information about the four test sections and score-to-grade (band) conversions. The Language Testing Research Centre considers possible revisions of test versions (items and (or) distractors within items) after operational analysis feedback. The OET Centre uses this information in rater (re-) training and assembly of future test forms.

Despite this, variation across repeated test attempts owing to factors such as concentration, fatigue and anxiety may be a factor. This may result in test takers obtaining scores that fall into a 'borderline' category (i.e., they attain a particular score that sits at established boundaries between band scores). In such cases the OET Centre is *not inclined* to take a 'benefit of the doubt' approach and *in the interests of patient-safety and healthcare outcomes*, will adopt a conservative stance in the reported score. This is an important component of the OET Centre's Quality of Service provision and the OET Centre is unequivocal in fulfilling its obligation to ensure the highest possible assessment standards.

Test scores

Many of the health professions currently accept alternative measures of English-language proficiency. This causes confusion over what is actually assessed. The OET Centre stresses the value of using a readily available, purpose-built test for health practitioners, the Occupational English Test, which was designed *specifically for the testing of health practitioners* and the mitigation of risk to health services due to inadequate English language skills. The OET Centre believes that the Occupational English Test has a direct, positive impact on the quality of Australian healthcare.

OET score patterns have remained consistent over time with a similar overall percentage of test takers obtaining the required standard (i.e., Overall 'A' and 'B' Grades for all subtests across all professions) across different administrations. The OET Centre briefs representatives from individual professions (on statistics and trends for their candidature) at the annual OET Stakeholders' meeting (discussed on the following page).



OET administration and security

The OET is administered in up to forty venues worldwide according to demand and, to ensure the OET Centre's rigorous test administration standards are upheld and protect intellectual property, the OET Centre has a Services Agreement with an Australian company for the global administration of the test. Apart from being highly experienced in test administration, the company source and train qualified test-site staff using comprehensive training modules developed by experienced assessment and operations staff from the OET Centre which are reviewed and refined after every administration. The contract details rigorous Performance Standards covering test taker identity checks, the test environment, compliance with the OET Centre's Test Regulations, testing rooms, equipment and staff performance. Strong penalty clauses apply for any breaches of standards.

Test site audits are carried out on a regular basis and the OET also receives information about the global administration provider's compliance with the contract's Performance Standards via Incident Reports, test taker feedback and, in the case of the audio-recorded Speaking sub-test, via feedback from OET raters in Melbourne.

OET Centre policy allows for any test taker who feels that an incident affected their performance at their administration of the OET to complete a request for special consideration within two weeks of the test or, alternatively, submit a request in writing to OET Centre management. All submissions and supporting documentation are thoroughly reviewed by the OET Appeals Committee before a decision is finalised and communicated to the test taker.

The OET Centre works closely with the Department of Immigration and Citizenship (DIAC) to identify and convey instances of improper test taker behaviour (e.g., suspected collusion, identity fraud, cheating). Representatives from DIAC attend annual OET Stakeholders' meetings and the annual 'OET Forum' event and the OET takes advice from DIAC on policy matters relating to language testing and changes to skilled migration.

The annual OET Stakeholders' meeting is attended by representatives from the health boards and councils who endorse the OET, as well as academic representatives from the University of Melbourne (School of Languages and Linguistics), and the Departments of Immigration and Citizenship (DIAC) and Education, Employment & Workplace Relations (DEEWR). The purpose of the meetings is to engage stakeholders involved with the creation and implementation of the OET, to gain feedback on aspects of OET policies and procedures as they affect various stakeholder groups and to discuss and develop best practice policy with regard to Quality Assurance and security.



Test information

Test information is included in *Appendix 1*. The information is given on the OET Centre's website and is available to all. The website contains samples of OET test materials which can be downloaded.

www.occupationalenglishtest.org

The OET as a specific-purposes language test

The OET has featured prominently in research literature relating to language testing in specific-purpose contexts (see *Appendix 2*). Language testing itself is a recognised subdiscipline within the field of Applied Linguistics (represented through a number of international journals and a body of academic literature).

The argument supporting any test of English for a specific purpose (ESP) is, in essence, one of validity and based on the fundamental goal of any language test, which is to make meaningful inferences about a test taker's performance in a non-test setting based on their performance on a particular test.

This is reflected in its design and current format. For example, the use of a simulated consultation (in the form of a role-play to elicit a sample of speech that contains elements of a typical patient-health practitioner exchange), strengthens the inferences that can be made from the test because there is a fundamentally *strong and direct link between the way language is used in test tasks and real-world tasks*. The various elements of these tasks (e.g., content, scenarios, the language demands placed on test takers), and the criteria used to assess performance on the tasks, are based on sound research undertaken at the design stage of the OET to demonstrate that the underlying ability being measured is valid.

The abilities being measured are represented not only through test tasks and test content but also by the criteria against which a test taker's performance is assessed. For example, raters (for the productive skills of writing and speaking) use a series of *descriptors* for a set of key criteria (contained within a rating scale) which separate levels of proficiency, essentially by defining what qualities, features, attributes and/or deficiencies of language performance test takers at different levels display.

These are *linguistic* criteria and descriptors that serve to highlight the underlying ability being measured, via discrete descriptions of that ability deemed important by test designers and health professionals which is supported by the original research. Samples of language performance (of test takers), which relate to the criteria, are elicited via carefully designed test *tasks*.

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By sampling content from the target-ability domain and capturing the uniquely defined ways that language is used in professional settings, the OET is able to measure the language proficiency of such professionals with greater confidence and precision than is the case with more general English proficiency tests.

An ongoing program of test validation research is supported through a Memorandum of Research understanding between the OET Centre and the Language Testing Research Centre at the University of Melbourne. Research studies explore quality control issues related to such areas as rater training, task design and the extent to which criteria currently used to assess performance are aligned with what matters for effective communication in the healthcare context. Research findings inform revisions to the test and test operations as required.

Inquiry outcomes

The Occupational English Test Centre welcomes the current inquiry into the registration processes and support available for Overseas Trained Doctors (OTDs). Submissions to the inquiry have rightly raised awareness of language testing as an important component in the registration of overseas trained health professionals. It is hoped that any misconceptions about the nature and function of the OET can be addressed through the inquiry. The OET Centre commits to providing assistance to the committee members as they work through the processes of the inquiry.

Yours sincerely,

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Denise O'Brien Chief Executive Officer Centre for Adult Education (CAE)



Appendix 1 - General Test Information

Description of the Occupational English Test (OET)

The OET is a specific-purpose language proficiency test. The OET is designed to assess beyond a test taker's knowledge of language to include use of that knowledge in the specific communicative settings that characterise the work-place of health practitioners.

Test content, task design and descriptions underpinning the assessment criteria reflect real-world language use through tasks that simulate language use in the work-settings of the 12 professions currently tested. The OET Centre conducts extensive, ongoing validation research to support the inferences drawn from test scores; such validation also underpinned the test's initial design.

OET Test format

There is a separate sub-test for each skill area assessed by the OET: Listening, Reading, Writing and Speaking.

Listening sub-test in brief

The Listening sub-test consists of two parts:

Part A: Part A consists of an audio-recorded, simulated professional-patient consultation with note-taking questions.

Part B: Part B consists of a recorded talk or lecture on a health-related topic with shortanswer/note-taking questions.

Each section consists of about 15 minutes of recorded speech. A set of questions is attached to each section and test takers write their answers while listening. The original recording is edited with pauses to allow test takers time to write their answers.

The format for Part A (the consultation) requires test takers to produce case notes under relevant headings and to write as much relevant information as possible. Most questions in Part B (the lecture) include indications on the number of points a test taker is expected to include.



Reading sub-test in brief

The Reading sub-test consists of two parts:

Part A is a summary reading task. This requires test takers to skim and scan 3-4 short texts (a total of about 650 words) related to a single health-related topic and to complete a summary paragraph by filling in the missing words. Test takers are required to write responses for 25-35 gaps in total, within a (strictly monitored) time limit of 15 minutes. Part A is designed to test the test taker's ability to source information from multiple texts, to synthesise information in a meaningful way and to assess skimming and scanning ability under a time limit.

In *Part B* test takers are required to read two passages (600-800 words each) on general health topics and answer 8-10 multiple choice questions for each text (a total of 16-20 questions) within a time limit of 45 minutes. Part B is designed to assess test takers' ability to read, in greater detail, general and specific information for comprehension.

A summary of the skills tested in the OET Reading sub-test is below. Test takers are given opportunities to:

In Part A:

- locate specific information in a range of short texts
- understand the relationship between different types of information
- understand the conventions of different text types
- identify underlying concepts
- draw logical inferences
- synthesise information from different sources
- differentiate main ideas from supporting information
- identify, distinguish and compare facts from a variety of text types
- understand the presentation of textual and numerical data
- summarise information for a non-medical audience
- use contextual clues to determine text meaning and to supply missing information
- recognise paraphrase
- use appropriate spelling and word forms

In Part B:

- understand main ideas
- locate specific information
- differentiate main ideas from supporting information
- identify underlying concepts
- draw logical inferences
- understand a range of general and medical vocabulary
- work out the meaning of a word or phrase from the context it is used in
- identify the underlying theme of a paragraph or text



- recognise paraphrase
- understand cohesion between parts of a text through lexical and grammatical cohesion devices
- follow a complicated argument that is made over several paragraphs
- distinguish between what is stated and what is not stated
- recognise the connections between ideas (e.g., causes and effect)

Writing sub-test in brief

The Writing sub-test involves a task in which test takers, via interaction with a set of clinical case notes, produce a letter (usually of referral) to another professional. The letter must record treatment offered to date and the issues to be addressed by the other professional following instructions given within the test. The letter must take account of the stimulus material presented in the case notes.

The body of the letter must consist of approximately 180-200 words and be set out in an appropriate format (duration - 45 minutes). For certain professions, other professional writing tasks of equivalent difficulty may also be set (e.g., responding in writing to a complaint, or providing written information to a specified audience in the form of a letter).

A summary of the *five* criteria against which test takers are assessed in the Writing subtest is below:

- 1. Overall Task Fulfilment including whether the response is of the required length
- 2. Appropriateness of Language including the use of appropriate vocabulary and tone in the response, and whether it is organised appropriately
- 3. *Comprehension of Stimulus* including whether the response shows test takers have understood the situation and provide relevant rather than unnecessary information to your reader
- 4. *Control of Linguistic Features* (grammar and cohesion) how effectively test takers can communicate using the grammatical structures and cohesive devices of English
- 5. *Control of Presentation Features* (spelling, punctuation and layout) how these areas affect the message test takers want to communicate



Speaking sub-test in brief

The OET Speaking sub-test is a test of the test taker's oral use of English language to communicate in a simulated health-related consultation.

The consultation is between a patient and a health practitioner, with the test taker taking the role of the practitioner and the interviewer taking the role of patient or patient's relative or carer (for veterinary science the interviewer is the owner or carer of the animal). The test taker and the interviewer interact face-to-face. It consists of two simulated consultations in the form of two role-plays (duration - 20 minutes).

A summary of the *five* criteria against which test takers are assessed in the Speaking subtest is below:

- 1. Overall Communicative Effectiveness including how well test takers are able to maintain meaningful interaction
- 2. Intelligibility including pronunciation, intonation, stress, rhythm and accent
- 3. Fluency including the rate (speed) and natural flow of a test taker's speech
- 4. Appropriateness including the use of suitable professional language and the ability to explain in simple terms as necessary; also, how appropriately test takers use language to communicate with the patient, in consideration of the scenario of each role-play
- 5. *Resources of Grammar and Expression* including the accuracy and range of the language test takers use; how effectively and naturally test takers communicate

Development of test materials

New test materials are developed on a regular basis for all four sub-tests. Listening and Reading materials are developed by the Language Testing Research Centre at the University of Melbourne as well as expert consultants in conjunction with the OET Centre. Test materials are piloted and trial results are subjected to statistical analysis to confirm validity and reliability.

Speaking and Writing materials are developed by experienced materials writers engaged by the OET Centre and in consultation with professional educators or experienced practitioners for each profession.

OET Assessment

The OET Centre works with the Language Testing Research Centre to ensure the reliability of test results and analysis. Each of the four sub-tests is assessed in a specific way (summarised below).



Assessment of the Reading sub-test

Answer sheets for Part A are scored by trained markers in Melbourne who work with the aid of a comprehensive Marking Key. Score sheets for Part B (multiple-choice responses) are computer-scanned by the University of New South Wales.

Assessment of the Listening sub-test

The Listening sub-test is marked in Melbourne. The Listening sub-test is assessed against a detailed marking guide prepared by the test designers. Problematic scripts are dealt with as a group by an experienced marker and all critical borderline scripts are doublemarked. Before each administration, test developers, the OET Assessment Manager and markers for the Listening sub-test conduct a formal meeting to finalise the marking guide, test audio and test-paper and to moderate their initial marking. A number of 'live' control scripts are utilised for the purpose of ensuring standardised marking among the marker cohort prior to the commencement of the assessment period.

Assessment of the Speaking & Writing sub-tests

Each test taker's writing paper and recorded speaking performance is marked by *two* independent raters in Melbourne. Sets of raw scores provided by each rater are sent to the Language Testing Research Centre where the test analysis program FACETS (Linacre, 2010) is used to analyse the score data. FACETS relates task difficulty, test taker ability, and rater harshness/leniency to each other. This allows it to adjust test takers' scores for the effect of an overly harsh or lenient rater. FACETS produces a fair-score that takes rater harshness and task difficulty into account. It also identifies raters who are overly harsh or lenient, or who rate inconsistently or too conservatively. These raters can then be retrained.

Issuing of results

Test takers receive a band conversion of the fair-score via mail in the form of a 'Statement of Results'. The Statement of Results shows the scores obtained at the most recent sitting (results for the four sub-tests that make up the OET are reported as one of five grades - A to E with A being the highest grade and E the lowest), as well as scores obtained on all sittings within the previous two years. Test takers are also able to access an overview of their latest test grades via their OET website online profile, 19 business days after each test day. Official, hard copy Statements of Results are mailed within five business days of the publication of results in online profiles.



Boards and councils can access results via the OET website. Registration authorities are encouraged to register for secure access to the site to check individual results; access to the online verification system is controlled by OET Centre management. In order to gain access, managers working for health profession Assessing/Registration Authorities can apply for individual staff members to have secure access to the relevant function of the OET website. At present a number of staff of the DIAC Skilled Processing Centre (Adelaide) and staff of 13 Australian & New Zealand Health Profession bodies are registered to do so.



Appendix 2 - Journal articles and other research outputs related to the Occupational English Test (OET)

- Alderson, J., Candlin, C., Clapham, C., Martin, D., Weir, C. (1986) Language proficiency testing for migrant professionals: new directions for the Occupational English Test. A report submitted to the Council on Overseas Professional Qualifications. Institute for
 English Language Education University of Lancaster, Lancaster.
- Basturkmen, H. & Elder, C. (2004) The Practice of LSP. In A. Davies & C. Elder (eds.) Handbook of Applied Linguistics (pp. 673-694). London: Blackwell.
- Chan, H. (2006). Test taker discourse and assessment criteria in the OET speaking subtest. Unpublished Masters Thesis. School of Languages and Linguistics, University of Melbourne.
- Davies, A. (2001) The logic of testing languages for specific purposes. Language Testing, 18 (2), 133-147.
- Douglas, D. (2000) Assessing Languages for Specific Purposes. Cambridge: Cambridge University Press.
- Douglas, D. (2001) Language for Specific Purposes assessment criteria: where do they come from? Language Testing 18 (2), 171-185.
- Douglas, D. (2010) Understanding Language Testing. Hodder Education.
- Elder, C. (2007) OET-IELTS benchmarking study. Final Report to the Occupational English Test Centre. 45pp. Language Testing Research Centre, University of Melbourne.
- Elder, C. (2008) Comparing tests: what to tell the stakeholders? Paper delivered at the 30th Annual Language Testing Research Colloquium, Zhejiang University, Hangzhou, China, 25th-28th June.
- Elder, C., Harding, L. & Knoch, U. (2009) Reading for the health professions: The Occupational English Reading Test revisited. Interim Report. Language Testing Research Centre, University of Melbourne.
- Harding, L. & Ryan, K. (2009) Decision-making in marking open-ended listening test items: the case of the OET. Spaan Working Papers in Second or Foreign Language Assessment 7, 99-114.

- Harding, L., Pill, J., & Ryan, K. (2011). Assessor decision making while marking a notetaking listening test: The case of the OET. Language Assessment Quarterly, 8(2), 108-126.
- Hawthorne, L. & Toth, J. The impact of language testing on the registration of immigration doctors. <u>http://elecpress.monash.edu.au/pnp/free/pnpv4n3/hawttoth.htm</u>
- Iwashita, N. & Grove, E. (2003) A comparison of analytic and holistic scales in the context of a specific-purpose speaking test. Prospect 18, 3: 25-35.
- Jacoby, S. & McNamara, T. (1999) Locating competence, English for Specific Purposes 18 (3), 213-241.
- Knoch, U. (2008) Factors influencing prompt difficulty on the OET writing task for nurses. Unpublished Report. Language Testing Research Centre, University of Melbourne.
- Knoch, U. (2009) Investigating the effectiveness of individualized feedback for rating behaviour: a longitudinal study. Paper presented at the 31st Language Testing Research Colloquium Denver Colorado, March 17-20.
- Knoch, U. (2011) Investigating the effectiveness of individualized feedback to rating behaviour a longitudinal study. Language Testing 28(2), 179–200.
- Linacre, J. M. (2010) Facets Rasch measurement computer program (Version 3.67.1). Chicago: Winsteps.com
- Lumley, T., Lynch, B. & McNamara, T. (1994) A new approach to standard-setting in language assessment. Melbourne Papers in Language Testing 3 (2), 19-40.
- Lumley, T. & McNamara, T. (1995) Rater characteristics and rater bias: implications for training. Language Testing 12 (1), 54-71.
- Lumley, T. & Brown, A. (1996) Specific-purpose language performance tests: task and interaction. In G. Wigglesworth & C. Elder (eds.) The Testing Cycle: from inception to washback, Australian Review of Applied Linguistics, Series S, Volume 13 (pp. 105-36). Canberra, Australian National University.
- McNamara, T. (1987) Assessing the language proficiency of health professionals. Recommendations for reform of the Occupational English Test. A Report submitted to the Council on Overseas Professional Qualifications. University of Melbourne Department of Russian and Language Studies, Parkville Victoria.
- McNamara, T. (1988) The development of an English as a Second Language speaking test for health professionals. Part One of a Report to the Council on Overseas Professional Qualifications on a consultancy to develop the Occupational English Test. University of Melbourne Department of Russian and Language Studies, Parkville Victoria.



- McNamara, T. (1989a) The development of an English as a Second Language writing test for health professionals. Part Two of a Report to the Council on Overseas Professional Qualifications on a consultancy to develop the Occupational English Test. University of Melbourne Department of Russian and Language Studies, Parkville Victoria.
- McNamara, T. (1989b) ESP testing: general and particular. In C. Candlin & T. McNamara (eds.) Language, learning and community (pp. 125-42). National Centre for English Language Teaching and Research, Macquarie University.
- McNamara, T. (1990a) Assessing the second language proficiency of health professionals. PhD Thesis. University of Melbourne.
- McNamara, T. (1990b) Item Response Theory and the validation of an ESP test for health professionals. Language Testing 7 (1), 52-76.
- McNamara, T. (1991a) Test dimensionality: IRT analysis of an ESP listening test. Language Testing 8 (2), 139-159.
- McNamara, T. (1991b) The role of Item Response Theory in language test validation, in S. Anivan (ed.) Current Developments in Language Testing (pp. 165-184). SEAMEO Regional Language Centre, Singapore.

McNamara, T. (1996) Measuring Second Language Performance. London: Longman.

- McNamara, T. (1997) Problematising content validity: the Occupational English Test (OET) as a measure of medical communication. Melbourne Papers in Language Testing 6 (1), 19-43.
- Ryan, K. (2007) Assessing the OET: the nurses' perspective. Unpublished Masters Thesis. School of Languages and Linguistics, University of Melbourne.
- Read, J. & Deverall, R. (2009) Achieving English proficiency for professional registration: The experience of overseas-qualified health professionals in the New Zealand context. IELTS Research Reports Vol. 10.