

# Facts & Figures

## Issue 1: A Historical Review



*The first in a new series of reports on the Canadian English Language Benchmark Assessment for Nurses (CELBAN).*

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*This is the first in a new series of reports on the Canadian English Language Benchmark Assessment for Nurses (CELBAN). Standards of practice in testing require supporting documentation for tests as evidence of ongoing reliability and validity (American Educational Research Association (AERA), American Psychological Association (APA), National Council on Measurement in Education (NCME), 2014) ( International Language Testing Association, 2007). As the organization responsible for the administration of CELBAN, Touchstone Institute is committed to ongoing quality control checks to ensure that the tests we administer are working as intended.*

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## Introduction to CELBAN

The Canadian English Language Benchmark Assessment for Nurses (CELBAN) is an assessment tool designed to assess the English

language proficiency of internationally educated nurses (IENs) who are applying for licensure in the nursing profession in Canada. CELBAN is an occupation-specific language proficiency test that assesses communicative competence within real-world health care scenarios and tasks. It evaluates proficiency in listening, writing, reading and speaking. It has been recognized as appropriate evidence of language proficiency by all Canadian nursing regulators, and is currently one of two accepted tests for this purpose; the other being the International English Language Testing System (IELTS).

CELBAN is owned by the CCLB and managed by a national administrative centre (The CELBAN Centre), which oversees CELBAN test administration at test sites across Canada.



*In the fall of 2014, the Centre for Canadian Language Benchmarks (CCLB) transferred the administration of CELBAN to The CELBAN Centre at Touchstone Institute. We received more than 22,000 records describing test-taking events for 4,509 candidates from The Red River College Language Training Centre Canadian English Language Assessment Services (CELAS) Centre Database. This first report highlights some of what we have learned about CELBAN from that data.*

## Background

CELBAN was developed by Red River College under contract with the CCLB over the course of a three-phase project from 2002 to 2004 (CCLB, 2002; CCLB, 2003; CCLB, 2004). The motivation for developing CELBAN was a projected shortage of nursing professionals in Canada. Internationally educated nurses entering the profession in Canada were seen as a viable health human resource, and a nursing-specific assessment tool was required to facilitate the entry and integration of nurses into the profession.

Phase I of the project was focused on understanding the minimum level of language proficiency required for nursing practice in Canada. The study was done in reference to the Canadian Language Benchmarks (CLB), a scale of language proficiency that describe language use from beginning basic (benchmark 1) to fluent

advanced (benchmark 12). The resulting report, *Benchmarking the English Language Demands of the Nursing Profession across Canada* (CCLB, 2002), determined the language benchmarks for nursing (speaking: 8; listening: 9; reading: 8; and writing: 7) and identified test-appropriate language tasks from which regulators could comfortably generalize about an applicant's language abilities.

Phase II involved the development and piloting of the assessment tool. During this phase, nursing subject matter experts, educational measurement experts and English as a second language (ESL) practitioners worked together to create and pilot the test items. The implementation phase, Phase III, saw the refinement of the administration procedures, assessor training and candidate recruitment. In 2004, the CELAS Centre was

established at the Red River College Language Training Centre to conduct CELBAN

assessments and oversee the implementation of test sites across Canada.

## CELBAN Candidates

The CELAS database contained records for 4,509 candidates from 2004 to 2014. Of these, 85% identify as female and 15% as male. The average age is 34 (+- 7.4). They come from 109 different countries of origin. The top 10 countries of origin are shown in Figure 1. Over time, there has been an increasing number of candidates from countries where English is one of the official languages. This increase may explain the observation that CELBAN scores have gone up consistently since 2010.

Figure 2 illustrates the top six countries of origin, and it can be seen that candidates from the Philippines and India have grown exponentially while the number of candidates from China, Korea and Iran remained reasonably stable. The transition of test administration from Red River College to Touchstone Institute resulted in a temporary drop in the rising numbers of test takers.

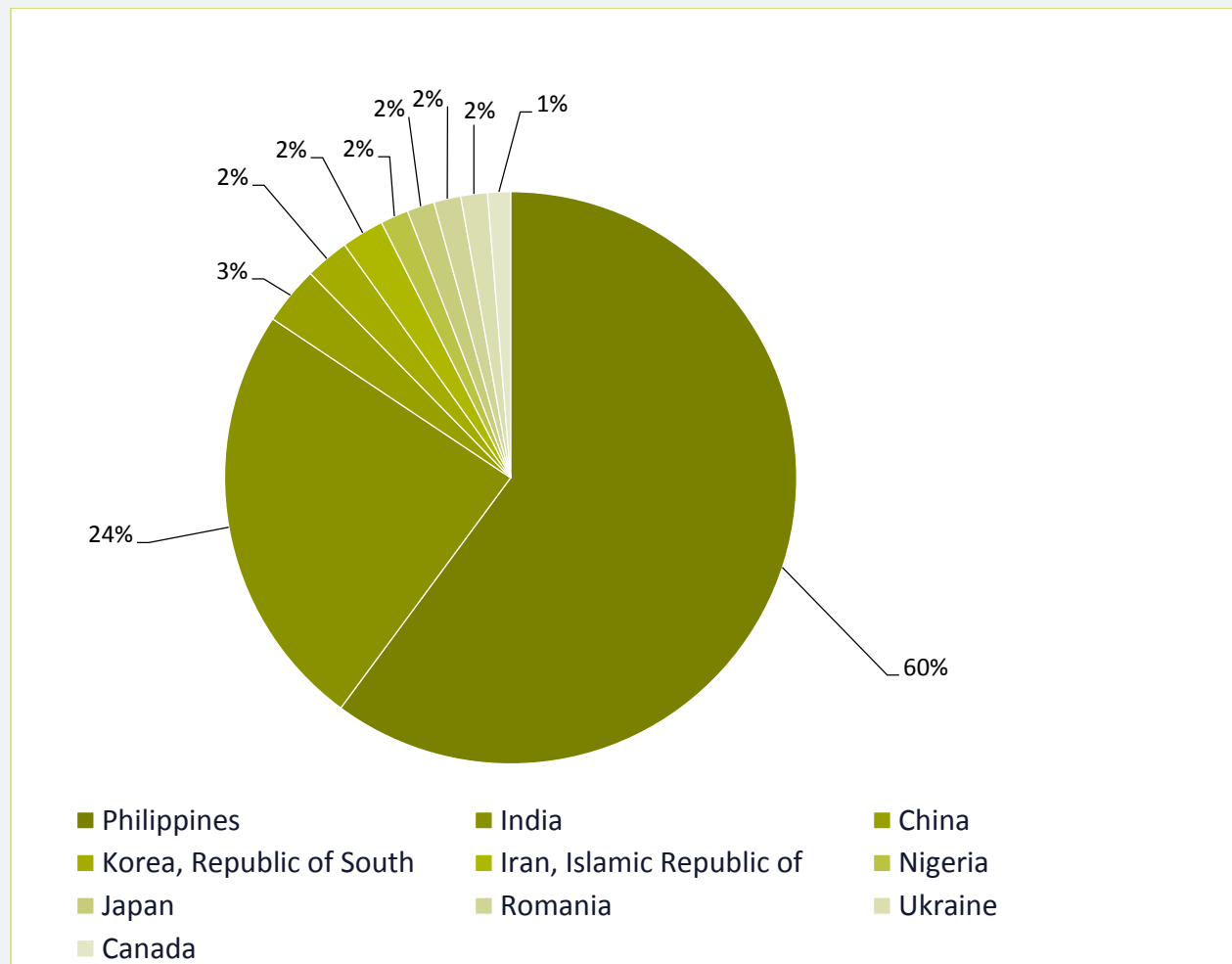


Figure 1. The top 10 countries of origin of CELBAN test takers

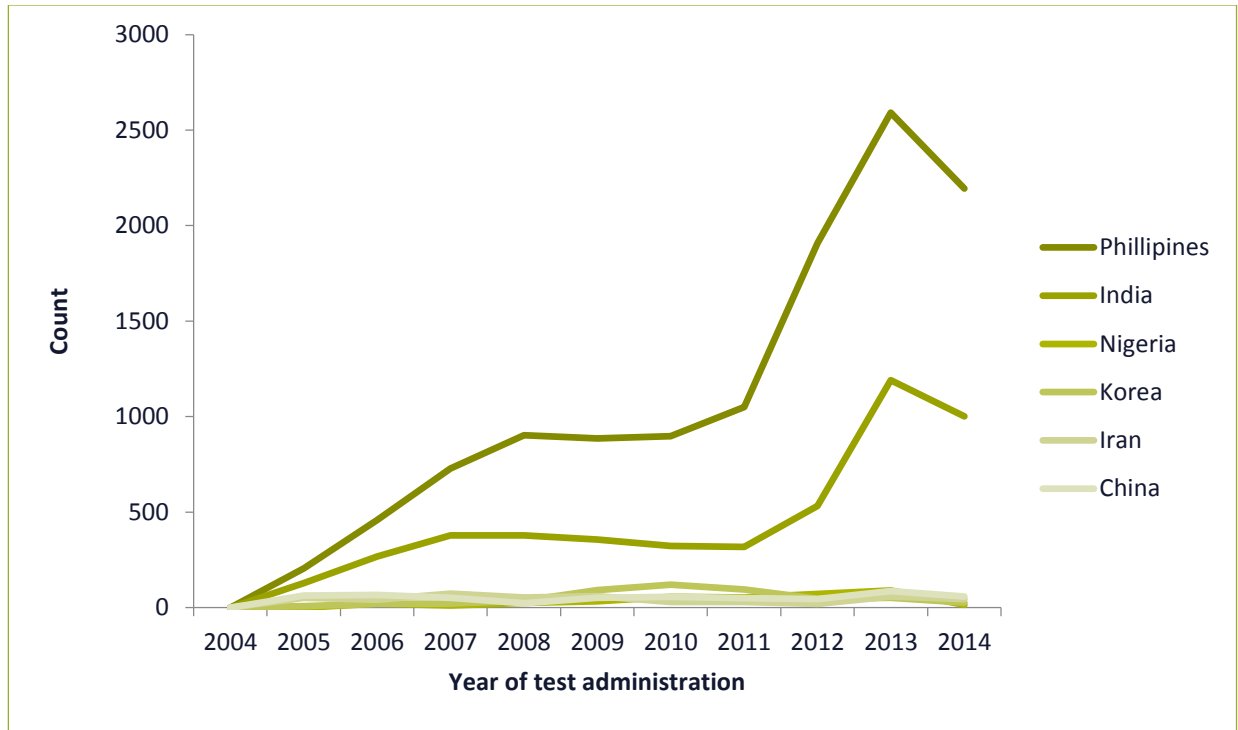


Figure 2. Count of test-takers from English speaking countries

## Test Versions

There are currently three versions for the CELBAN test. The frequency of use of each test version from 2004 to 2014 was calculated based on the count of scores per test component. Figure 3 indicates that version 1 was most often used, followed by version 2 and version 3. This pattern can be partially explained by the fact that version

3 was developed later than the first two versions. The lower count of speaking tests for versions 2 and 3 might be explained by the fact that candidates were allowed to complete the speaking test component separately from the group test (reading, writing and listening).

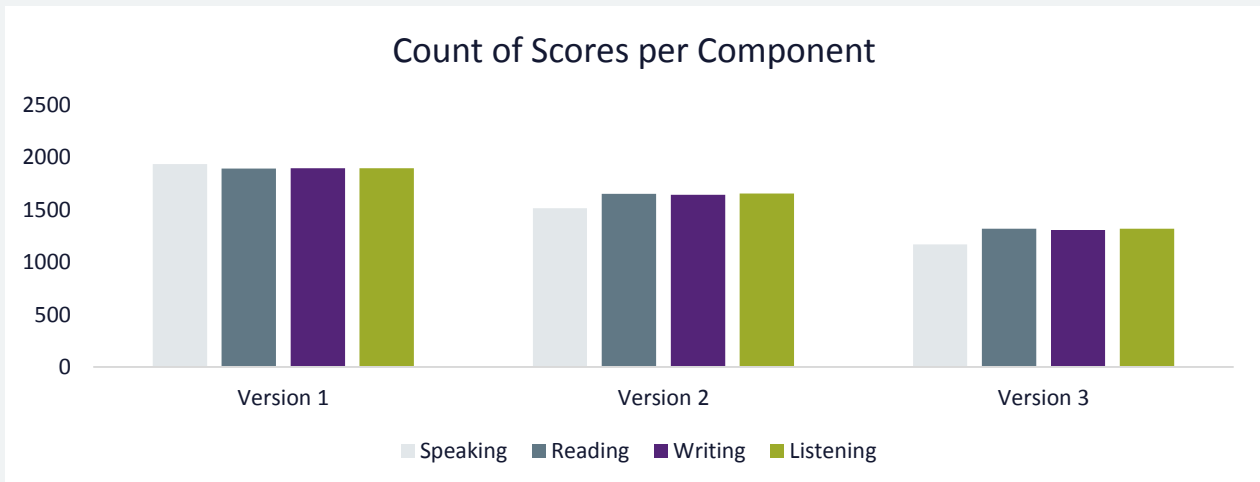


Figure 3. Frequency of use per test version

## Reliability

The goal of the CELBAN assessment is to evaluate and help discriminate between candidates based on their language skills. Psychometrically, we can evaluate how well CEBAN is able to accomplish this by analyzing the reliability of the test components.

Based on the historical data, there was moderate agreement or consistency between scores for the four test components within each test version (Table 1). The reliability is good for the versions and is approaching the standard value of 0.8. CELAS reported strong reliability in the later years (2010–14), so this general historical data analysis may be influenced by the fact that the CELAS database includes some data from early pilot trials.

Test version	Reliability of all four components	N
Version 1	0.762	1573
Version 2	0.738	1313
Version 3	0.741	1032

**Table 1. Reliability coefficients for each test version**

## Test security

A feature of CELAS's test security policy has been to limit the number of times candidates complete CELBAN. In the policy, candidates are limited to three attempts (representing each test version). Despite CELAS's manual registration

system, this policy worked reasonably well. Only 98 of the total 4,509 candidates attempted the listening, reading and writing assessments at least three times; only 47 candidates attempted the speaking assessment at least three times.

## Average scores over time

The average scores over time (Table 2) are reflective of the cut-scores that were set originally by the test developers based on the benchmarking analysis of the nursing profession (CCLB, 2002), in place from 2004 to 2010, and revised in 2011 by the Canadian Council of Registered Nurse Regulators (CCRNRR)<sup>1</sup>:

Test component	2004–2010	2011 onwards
Speaking	8	8
Listening	9	10
Reading	8	8
Writing	7	7

**Table 2. Average scores over time for each test component**

This is not surprising given that IENs who seek licensure in Canada have commonly completed English-language training and assessments before applying to the regulators. In our current practice at The CELBAN Centre, we have observed that in general, CELBAN candidates present with language skills in the range of CLB 6 to 10.

## Conclusions and Future Vision

This report draws from a historical database developed during the implementation phase of CELBAN. While the historical database had an important function in managing data from registration forms and creating test results reports, it did not capture test data at the item and task levels. Touchstone Institute has developed a database for the collection of CELBAN test data that will provide a more detailed understanding of the test items and tasks and test-taker performance for the purposes of quality assurance. This data will allow for more detailed psychometric analysis, the observation of trends in test-taker performance and the development of new test versions. These will be the subjects of *Facts & Figures* reports.

<sup>1</sup> The Canadian Council of Registered Nurse Regulators (CCRNRR) was formed in 2011 to act as a national forum and voice regarding interprovincial/territorial, national, and global regulatory matters for nursing regulation. In 2011 the group harmonizing language

proficiency scores required as evidence of language fluency and as a result of the standard setting activities conduct during this process the CELBAN listening score was changed.

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