

DEVELOPING A CULTURALLY MINDFUL CURRICULUM AND OCCUPATION

Specific assessment for an optometric bridging program

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Abstract

Citizenship and Immigration Canada funds bridging programs that are designed to orient foreign-trained professionals to Canadian workplaces and bridge skills gaps that may exist between foreign and Canadian certification. These programs provide pathways for professional foreign-trained immigrants to comparable professional Canadian workplace contexts. This paper reports on the implementation of a bridging program for foreign-trained optometrists. We began with a communicative-skills needs analysis of the optometric profession in a North American context, and we used that information to develop a curriculum and an occupation-specific English-language proficiency assessment. The curriculum was informed by the concept of cultural intelligence (Thomas & Inkson, 2004) which includes developing knowledge about, becoming mindful of, and adapting behaviour to support successful navigation of new cultures. To determine the impact of the curriculum, we developed the Optometric English Language Proficiency Assessment (OELPA), which assesses reading, writing, listening, and speaking skills in optometric contexts. Careful delineation and constant communication of the strengths and weaknesses of the assessment were used to situate the OELPA appropriately within the scope of the bridging program. This paper has relevance for curriculum development and workplace assessments in other professional contexts.

In order to practice optometry in Canada, candidates who hold North American degrees in optometry must write the Canadian Assessment of Competence in Optometry (CACO). Prior to the development of the bridging program that this article describes, only individuals with North American optometry degrees were allowed to write the CACO exam. In the years 2004 to 2007, a select few foreign-trained (i.e. outside of North America) optometrists were allowed to write the CACO. The pass rate for this select group was only 16 percent (Turnour, 2015). This low pass rate made evident the need for a bridging program to create a pathway for foreign trained optometrists to practice optometry in Canada. In 2006, Citizenship and

Immigration Canada provided grant money to the School of Optometry at the University of Waterloo to develop the International Optometric Bridging Program (IOBP). The IOBP was first offered in 2007 and consists of optometric lectures, clinical labs, internship and externship placements, and Enhanced Language Training (ELT). Once the program has been completed, the internationally educated health professionals (IEHPs) are eligible to write the CACO exam.

Anticipating the IEHPs' need for English language instruction, the IOBP Director approached the university's English Language Institute during the program development phase. In order to support the IOBP program participants in the most effective manner, the English-language instructors began a language-needs analysis for the optometric profession. The first source of information for the needs analysis was the optometry faculty who were expected to be involved in the delivery of the bridging program. As several faculty members were practicing optometrists, they were in a position to reflect on the language needs of optometrists. The Essential Skills Profiles developed by the Government of Canada (n.d.) provided further valuable information for the needs analysis.

Information collected from these sources suggested that the prime language skills used by optometrists are listening and speaking, which are required for their interactions with patients, staff, and colleagues. Reading skills also play an important role in optometric practice, as optometrists need to read patient charts and informational texts to remain current in their field. Writing plays a supportive role, as optometric texts (e.g. letters of referral to specialists and letters to insurance companies) are often formulaic in nature. All these skills need to be informed by cultural awareness for effective optometric communication.

Adding another layer of complexity to the needs analysis was the fact that the IOBP program includes approximately five months of classroom study. This means that participants need skills traditionally required of university-level students: strong reading, listening, and note-taking skills. Optometric lectures are typically scaffolded through PowerPoint presentations, with students receiving copies of the lecture slides to support their note-taking skills. Language skill requirements for clinical labs (an important component of the IOBP program) are commensurate with those required for optometric practice. With this information in mind, the English language instructors set about developing a program curriculum for the ELT component of the IOBP program and an optometric English-language proficiency test, to be called the Optometric English Language Proficiency Assessment (OELPA). The purpose of developing the English language proficiency test was to determine the impact of the ELT curriculum within the IOBP program. The curriculum and the test were developed concurrently, with substantial interaction between the developers. Our purpose in this paper is to describe the ELT component of the IOBP program, the integration of cultural awareness into the curriculum, and the development and dynamic use of the Optometric English Language Proficiency Assessment (OELPA).

The IOBP program: Two streams

To be accepted to the IOBP, internationally educated optometric professionals wishing to practice optometry in Canada are required to submit their credentials for assessment, participate in a Prior Learning Assessment and Recognition (PLAR) process, and provide a Canadian Language Benchmark score (with the minimum requirement being a CLB 8). The results of these assessments are used to assign candidates to one of two bridging streams. The Bridging One stream is a ten-week program composed of 200 hours of lectures, clinical instruction, and a four-week externship that provides experience in direct patient care. As program participants are typically Canadian, English-speaking students who trained in the United Kingdom, or in countries where English is the medium of instruction, it was not anticipated that participants would require ELT. The Bridging Two stream is a 48-week program consisting of 22 weeks of lectures, clinical instruction, a 26-week externship, as well as an ELT component described below. Language specialists work with the participants in the Bridging Two program to support occupation-specific English language development with ELT.

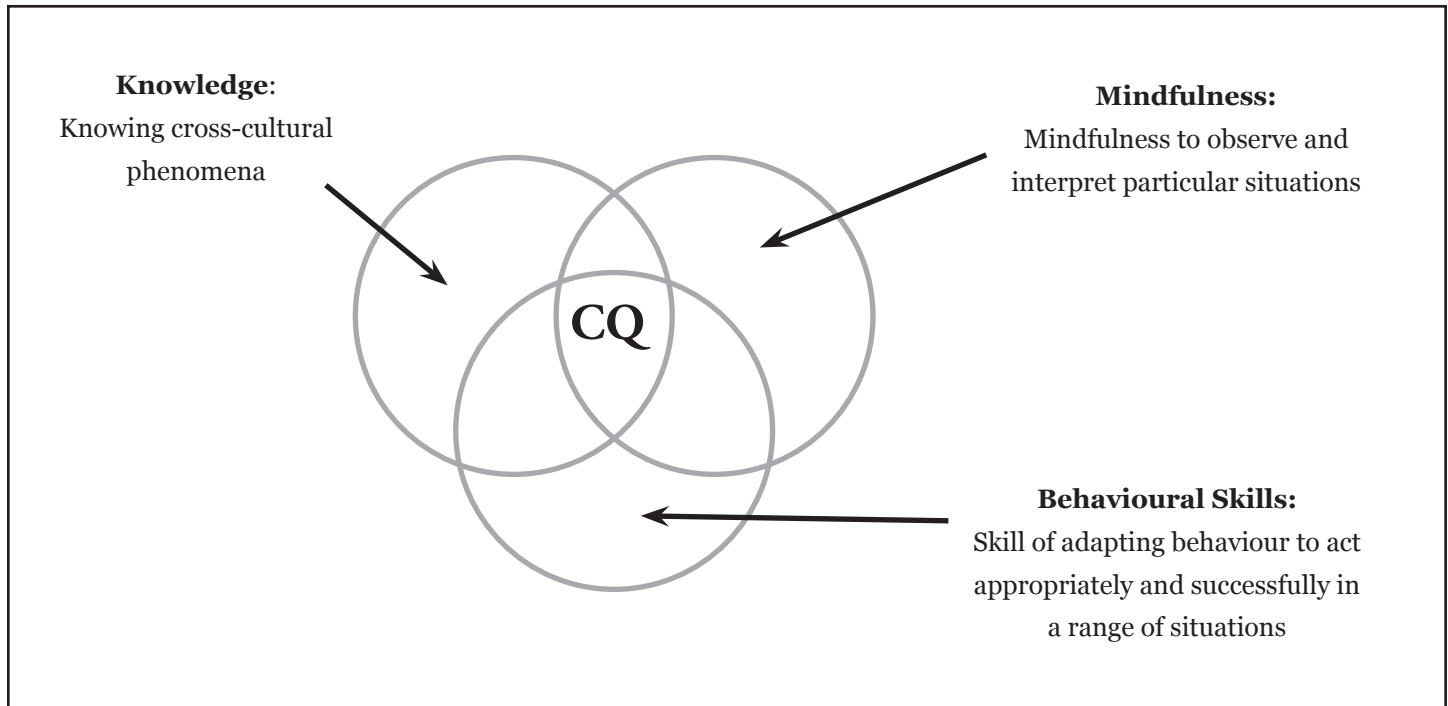
Enhanced language training component within the IOBP II program

The ELT component of the Bridging Two program consists of 19 hours of in-class instruction in integrated skills, 30 hours of instruction in listening and speaking, and 14 hours of instruction in writing development, all of which are taught concurrently with the optometric academic program. Participants also receive language support through 48 hours of uniquely structured clinical lab experiences that accommodate the simultaneous delivery of content and language instruction. In these labs, the optometry professor teaches a clinical technique, which the students then practice in small groups. During the practice stage, the language instructor circulates amongst the groups, providing feedback on language use and cultural appropriacy.

Integration of Cultural Intelligence into the ELT curriculum

The main purpose of the ELT component of the IOBP program was to provide assistance in adopting a culturally bound professional discourse (Wette, 2011) rather than a remedial English course. When planning the curriculum, it was anticipated that students would find it difficult to situate language within the North American cultural context of the optometric profession. Thus, a main objective of the program was to increase cultural awareness along with ameliorating language skills. Thomas and Inkson's (2004) model of Cultural Intelligence (CQ) served to provide a framework for integrating cultural awareness into the ELT curriculum. The framework defines an individual with CQ as being skilled and flexible about understanding a culture, learning about it from ongoing interactions, and gradually reshaping thinking to be more sympathetic to the culture. It also calls for behaviour to be more skilled and appropriate when interacting with others from the culture.

Figure 1. The Cultural Intelligence Model. Adapted from Thomas, C. & Inkson, K. (2004).



As Figure 1 shows, the CQ model has three aspects: knowledge, mindfulness, and behavioural skills. In order to teach language and culture through this model, instructors first had to increase student knowledge of cross-cultural phenomena within the optometric profession. This entailed knowing what the culture is, how cultures vary, how culture affects behaviours, how to be self-aware and be aware of others. The second aspect is mindfulness, which can be defined as the ability to pay attention in a reflective and creative way to cues in cross-cultural situations and includes being consciously empathetic. The final stage is based on activating learners' knowledge and mindfulness by developing behavioural skills to be competent across a wide range of intercultural situations. It entails change of previous behaviours in order to adapt.

Activating cultural knowledge

In accordance with Thomas and Inkson's model, activating cultural knowledge is one of the first steps to developing CQ. To do this in the optometric context, ELT instructors held awareness-raising discussions of the cultural differences in doctor-patient relationships. For example, while the North American culture is patient-centred in that patients can make final health decisions even if their decisions oppose the advice of the doctor, other cultures are doctor-centred, and patients are not expected to question doctors' decisions. This discussion was useful as participants were able to share how doctor-patient relationships are hierarchical in their cultures. In these cultures, doctors are distanced from patients, and do little to explain eye conditions. Further, any explanation has to be in medical terms as it demonstrates the doctor's superior expertise; the use of lay-language is not used

as it reduces the distance between the patient and the doctor. Some of the participants were from cultures where doctor visits are social events and entire families are allowed to be present for eye examinations. Others described situations where diagnoses are kept from patients and are discussed with the family. Further knowledge raising discussions of cultural differences included orientation to time, power distance, and interactions with others as it pertained to the profession (Rosinski, 2003; Storti, 1999).

Enhancing cultural mindfulness

While students were building awareness of cultural orientation to the optometric profession, it was important to develop activities in the program that allowed the participants to experience the differences in order to increase their mindfulness of a patient-centred practice. Mindfulness became the focus of instruction. Initial in-class instruction included many role-plays. The instructors created activities that required the participants to ask patients questions and clarify information provided by the patient. This allowed instructors to draw participant attention to the grammatical accuracy of question formation and to teach how questions can be asked directly and indirectly. Participants needed to judge when it was appropriate to ask questions formally or informally. Role-plays included questioning a child, a teenager, an elderly person, a nervous patient or an angry patient. These scenarios provided opportunities for students to practice tone and how it should be softened for children and the elderly, for example, while tone may need to be firm with other patients, depending on the situation. Instructional time was spent on eliciting patient medical history information as the participants had difficulty with accurate verb tense use and appropriate word choice. Pronunciation practice was also a focus; the participants became resources for medical terminology, which was listed on the classroom board, and instructors used this authentic language to draw student attention to phoneme articulation, syllable stress, sentence stress, and intonation patterns.

Despite the IOBP participants' well-established knowledge of medical and technical terminology (such as *macular degeneration* and *tonometer*), they needed to be mindful when explaining terminology to patients. This allowed for a focus on the explanation of the terms through the use of lay language. In the patient-centred context, IEHP's should skillfully use lay language to explain diagnoses, procedures and to reassure patients. This was an important aspect of the training with doctor and patient role-plays to explain such conditions as amblyopia and cataracts. It required students to simplify language and use analogies to help with patient understanding. This proved very challenging for the students. While they could easily define terms using medical expressions, they lacked the vocabulary to create analogies. For example, to describe that the beginning of a cataract is like looking through a piece of cloudy glass or using a camera and taking a picture out of focus challenged the IEHPs. Students were taught strategies to paraphrase patient statements and to ask clarification questions in order to improve communication. Students practiced pausing and chunking the language. Some students spoke very rapidly, and the "patient" was often unable to comprehend, especially long utterances. It was found that

role-plays between the student and the instructor were more effective than the student-student role-plays, as students knew the terminology and tended not to use lay language. The “patients” often provided answers for the “doctor” rather than asking typical patient questions. During the teacher-student role-plays, the other students observed and provided peer feedback not only on pronunciation but also on grammatical accuracy and choice of vocabulary. The observing students were mindful and often commented on culturally inappropriate behaviours such as sitting too close to the patient. Overall, the role-plays were very effective teaching tools.

Another area of mindfulness instruction focused on being sensitive to giving bad news to a patient. This again provided practice for tone, pronunciation and grammar during role-plays. Participants learned the importance of knowing the audience and changing the delivery of the news accordingly. They needed to communicate a diagnosis in a way that was neither blunt nor an avoidance of the truth. They achieved this goal by mixing a variety of indirect phrasings (e.g. using conditional verbs, euphemisms, hedging), by means of their prosody (e.g. soft intonation, pausing, having a concerned quality of the voice), and by checking patient understanding and giving the patient time to absorb the news. They learned the importance of body language such as leaning forward to show interest. The desired goal was to give a patient the overall impression of an optometrist who cares and does not want to hurt the patient’s feelings.

Some of the participants found giving bad news a challenging part of the training as there were many cultural differences in this regard. Depending on the culture, bad news could be delivered with either blunt directness or with vague indirectness. Some students came from cultures where saying “my dear,” and sitting close and touching the patient’s knee were the norm, and perhaps the bad news was not made evident. Some struggled with softening tone and some with lay language. In order to help students with this, the optometry professors provided case studies that instructors could use to increase mindfulness. The case studies were written in part as a medical explanation and in part as a doctor-patient dialogue. The language in these studies was extremely valuable for the students as training for their optometric board exams, in which they needed to give an explanation of a procedure using first medical terminology and then again in lay language to a patient. These case studies were used as role-plays for further pronunciation and grammar practice, as well as to increase mindfulness of cultural differences.

The in-class instruction of the IOBP program was not based solely on listening and speaking skills but also on writing skills. The writing curriculum was developed in conjunction with the optometric professors, based on their writing models and was divided into three areas: writing pattern and audience, written feedback, and word choice and collocations. The students’ writing efforts were focused on three types of optometric writing and the corresponding audience: a referral letter, a report letter, and a résumé and cover letter. Referral letters and reports tend to follow a prescribed template used in the profession; consequently, instructors were able to focus on grammatical accuracy and tone of the letter

as well as content. However, résumé and cover letter writing is culturally bound, with the North American cover letter focusing on self-achievement. Some of the students needed to be mindful of not being too humble and downplaying their strengths. Others needed to be aware of not being too flowery in their writing and using phrases such as *Dear Esteemed Sir*. The cover letter and résumé were pieces of authentic writing that the participants could use when applying for their externships and, possibly, their future positions.

In summary, once students had gained the cultural knowledge of the optometric profession and had built mindfulness through extensive role-plays and language practice in the ELT classroom, they were able to demonstrate culturally appropriate behaviour in the clinical labs.

Culturally appropriate behaviour in the IOBP clinical labs

The IOBP labs are a unique form of optometric content-based instruction with ELT support. The physical clinical lab was divided into approximately eight small areas, each of which was complete with the full equipment found in an optometrist's examining room. The discourse was authentic, and the participants needed to reflect upon their behaviour as well as their language. They needed to consolidate knowledge of the discussions about cultural differences with the practice of mindfulness in the ELT classroom as they performed authentic optometric tasks in a culturally appropriate manner.

Each clinical lab began with a lecture, delivered by an optometry professor, on a specific procedure such as testing for glaucoma or using an instrument called a keratometer to measure the curvature of the cornea when fitting a patient for contact lenses. ELT instructors attended these lectures and were able to note important vocabulary or potential grammar that would be needed during the procedure and that could be used and practiced in subsequent ELT classes.

Students were then paired to play the roles of doctor and patient in order to practise the specific eye exam procedures and to use the optometric equipment. Usually, there were two or three optometry professors in attendance to guide the students with the procedure. The ELT instructors observed and gave feedback on pronunciation, body language, cultural appropriacy, and grammar as needed. They also liaised with the optometry professors in order to give further guidance to the participants in terms of lay language or professional cultural appropriacy. Interestingly, the IOBP student playing the role of the patient often told the one playing the role of the doctor how to perform the procedure using technical language, which was contrary to the goal of the task of using lay language with a patient. Accordingly, it was helpful if the ELT instructors played the part of the patient, thereby increasing the authenticity of the situation as they did not have the same knowledge as the students. The ELT instructors were able not only to give feedback on the language and pronunciation but also to indicate if the doctor was too close physically or not thinking about the comfort of the patient; for example, the chinrest might not be at the correct

height. Through these experiences, the ELT instructors built subject knowledge that was pertinent for further classroom instruction.

The labs integrated the three aspects of CQ: knowledge, mindfulness, and behaviour. In their final course evaluations, the IOBP participants stated that the ELT instruction and the practice in the labs was authentic and personalized to the situation. One student commented that the labs “gave me base idea how the future work will be, and pointed out my shortage where I need put my effort on.” Others wrote, “I’m more confident speaking in labs,” and, “this course helped me . . . in counseling patients.”

The Optometric English Language Proficiency Assessment (OELPA) Development and Use

In order to test the impact of the ELT, a test was developed to assess the participants’ pre- and post-program language skills. The OELPA is unique as it is a fully optometry-specific English language proficiency assessment that tests all four language skills in optometric contexts. (The Occupational English Test also tests optometric knowledge, but only the writing and speaking skills are occupation-specific with listening and reading skills being common across healthcare professions.) From the time of its first administration, there was consistent pressure to use the assessment for purposes for which it was not intended. Careful delineation and constant communication of the strengths and weaknesses of the assessment were required to situate it appropriately within the bridging program. It was initially developed for the purpose of determining the impact of the ELT program on Bridging Two participants. Its development was not funded through a CIC grant but was undertaken by ELT instructors who wished to determine the effectiveness of the ELT component for the Bridging Two participants. The possibility of using standardized tests for this purpose was considered and rejected, as none of the available standardized tests were fully optometry-specific, and the cost of the standardized tests prohibited their use as pre- and post-program tests. Other theorists have noted the limitations of standardized tests for workplace-specific contexts (Douglas, 2000; Ekkens & Winke, 2009; Grove & Brown, 2001; Wette, 2011). The development of the OELPA was informed by the Canadian English Language Benchmark Assessment for Nurses (CELBAN) and the International Pharmacy Graduate Language Assessment (IPGLA), both of which were developed with CIC grant assistance. Williams presented details of the development at the 2008 conference entitled *Moving Forward Together: A Conference on Higher-Level Language Training*, sponsored by CIC at Niagara Falls, Ontario. Briefly, the stages of the OELPA development included information from the language needs analysis, completed in conjunction with optometry professors, the elaboration of test specifications, item writing, rubric generation, pilot testing, the development of scoring and reporting procedures, and content maintenance and revision.

The test assesses all four language skills. The listening test tasks include listening to a video of a routine visit to an optometrist and to an optometric lecture; the reading tasks include reading a patient care record, a case study, a journal article, an optometric newsletter, and

a textbook excerpt. Test-takers listen and read, and respond to multiple-choice questions. This item format is deemed appropriate in these sections of the OELPA as the CACO exam is composed of multiple-choice questions. In the writing section, test-takers respond in writing to a short case study and write a letter of referral. In the speaking section, test-takers answer general questions and play the role of an optometrist in an interactive doctor-patient role-play that requires them to both clarify a patient problem and explain a diagnosis. And finally, test-takers analyse an optometry-related data set and respond orally.

From 2007 to 2011, the OELPA was used as a pre- and post-program test to measure changes in workplace-specific language proficiency. The assessment was administered at the beginning and end of the initial 22 weeks of lectures and clinical instruction, just prior to the start of the 26-week externship placements. As the externship positions were widely distributed across Canada, it was most practical to administer the post-program assessment before the participants left for their externships. Scores were reported to Bridging Two participants within two weeks. While the scores were shared with the IOBP administrators and the participants, the sole purpose of the scores was to demonstrate whether the ELT component of the program had a positive impact on the participants. In fact, the scores did demonstrate that the participation in the Bridging Two program improved their workplace-specific English language proficiency skills, with most participants showing gains. The scores were used to determine neither entry into the program nor exit from it. They were used for a low stakes purpose only, which was appropriate for a test that had not been statistically evaluated for validity or reliability.

In 2013, the IOBP administrators asked if the OELPA could be used in the PLAR process. Instead of using the assessment only with program participants, they wished to administer the test to all program candidates. This was a much larger candidate pool; it included candidates for both Bridging One and Two programs, and many of the candidates in this larger group were from English-speaking backgrounds. Many were Canadians who had studied optometry in Great Britain and were returning to Canada to practise. This was not a group of candidates who had been anticipated at the time of the OELPA development. Further, the IOBP administrators suggested that the assessment scores be used to screen candidates for the program, effectively requesting that the assessment be used for high stakes admissions purposes. Given the limitations of the assessment, the ELT instructors could not agree to this use of the test. They carefully delineated the strengths and weaknesses of the test for the program administrators, indicating that, without statistical analyses (which would require additional resources), the test could not be used for high-stakes purposes.

For the following three years, the OELPA was administered to all program candidates during the PLA period; however, the ELT instructors resisted the request to use the test for high-stakes purposes for admission. Instead, the test scores were used to identify successful candidates that might benefit from the ELT component of the IOBP program. Prior to

this date, all Bridging Two candidates had attended the ELT classes. However, from 2013 forward, candidates who were admitted to either the Bridging One or Two programs could be exempted from the ELT component of the programs by scoring above the 75 per cent cut score on the OELPA.

This was a compromise in the use of the test scores that resulted in the OELPA being used for “medium-stakes” purposes. The test scores were provided to the IOBP program administrators only for the candidates who were admitted to the program. This ensured that OELPA scores were not used for admissions purposes. Those candidates who scored below the cut score were required to attend the ELT component of the Bridging programs. This requirement had a considerable impact on participants as attendance necessitated a time commitment. However, the potential for high-stakes impact was reduced as the ELT instructors were able to modify who attended if they felt the test had erroneously placed a participant in the ELT class or excluded a participant from the class. For example, if a test score placed a participant in the ELT class, yet after working with the participant the ELT instructor felt that he or she was sufficiently proficient not to need the class, that participant could be exempted from the class at that point. This option of teacher-mediated placement prevented the test scores from being used in a fully high-stakes manner.

In 2015, the Canadian Association of Optometrists (CAO) became concerned that the IOBP program administration was delivering not only the Bridging programs, but also the PLAR process, including the OELPA. The CAO believed this opened the program to possible perception of conflict of interest. The Association recommended that the PLAR process be managed by an arm’s length organization, which would administer all the assessments (both clinical and knowledge-based) and the OELPA. This was yet another call for the OELPA to be used for a high-stakes purpose. Fortunately, it appears as though the acquiring organization is in a position to devote the resources required for statistical evaluation of the validity and reliability of the OELPA and for further test development. Under these circumstances, new versions of the test could be developed that may be used for high-stakes purposes.

In our experience with the development and administration of the OELPA, we have found consistent pressure to use the assessment in ways that did not align with its original purpose. Designed with the intention of determining ELT program effectiveness, there was administrative pull to use the test for high-stakes admission purposes. Throughout the trajectory of the Bridging Two program, appropriate positioning of the OELPA required clear communication between the IOBP administrators and the ELT specialists. Without open communication about the strengths and weaknesses of the assessment, the test could have been pushed into use for a purpose that would have been indefensible.

Our experiences may resonate with other occupation-specific test developers and administrators. It is hardly unusual to maintain that tests should be used only for their intended purposes; however, the need to guard against administrative pressure to use the test for unintended purposes was eye opening. The only solution to this pressure is to work

consistently to communicate why the assessment tool can be used for some purposes and not for others, and this requires constant collaboration with the content experts.

Conclusion

The IOBP program is unique in the cultural orientation of its ELT component, and the simultaneous delivery of content and language instruction in the clinical labs. Another noteworthy aspect of this program is the persistent need to resist ongoing administrative pressure to use the optometry-specific test for increasingly high-stakes purposes. As our experiences have shown, the collaboration of language specialists (both ELT instructors and test developers) with the optometry professors was key to building a strong language program with a cultural focus on the optometric profession and to maintaining the appropriate use of the OELPA within the program and PLAR process. Since the inception of the IOBP program, the pass rate of bridging program participants has improved significantly. In 2013-2014 (the most recent year for which data is available), the CACO success rate of the students who completed the Bridging Two program was 73 percent. The CACO pass rate for the 2013-2014 cohort of combined Bridging One and Two participants was 81 percent (Turnour, 2015). This is one measure of the success of the IOBP program. We hope our experiences may be transferable to other workplace bridging programs and therefore useful to a broader spectrum of language and occupation-specific specialists.

References

- Douglas, D. (2000). *Assessing languages for specific purposes*. Cambridge, UK: Cambridge University Press.
- Ekkens, K. & Winke, P. (2009). Evaluating workplace English language programs. *Language Assessment Quarterly*, 6, 265–287.
- Government of Canada (n.d.). Essential skills profiles by occupation. Retrieved from Government of Canada website: www.esdc.gc.ca/en/essential_skills/profiles/index.page
- Grove, E. & Brown, A. (2001). Tasks and criteria in a test of oral communication skills for first-year health science students: Where from? *Melbourne Papers in Language Testing*, 10(1), 37–47.
- Rosinski, P. (2003). *Coaching across cultures*. London: Nicholas Brealey Publishing.
- Russell, B., Strachan, A., & Shek, P. (2006). Developing CLB Referenced Assessments for Internationally Trained Health Professionals. In B. Courchène & H. McGarrell (Eds.) *Contact: Special Research Symposium Issue*, 32(2), 86–103.
- Storti, C. (1999). *Figuring foreigners out: A practical guide*, London: Nicholas Brealey Publishing.
- Thomas, C. & Inkson, K. (2004). *Cultural Intelligence*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Turnour, M. (2015). Private correspondence with the authors.
- Wette, R. (2011). English proficiency tests and communication skills training for overseas-qualified health professionals in Australia and New Zealand. *Language Assessment Quarterly*, 8, 200–210.
- Williams, J. (March 2008). An English Language Proficiency Assessment for Optometrists. *Moving Forward Together: A Conference on Higher-Level Language Training*. Niagara Falls, Ontario.