

RESEARCH PAPER

How Australian and New Zealand schools of optometry prepare students for culturally competent practice

Clin Exp Optom 2014; 97: 540–549

DOI:10.1111/cxo.12196

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Submitted: 12 January 2014

Revised: 21 April 2014

Accepted for publication: 25 May 2014

Background: This study is an investigation of how Australian and New Zealand schools of optometry prepare students for culturally competent practice. The aims are: (1) to review how optometric courses and educators teach and prepare their students to work with culturally diverse patients; and (2) to determine the demographic characteristics of current optometric students and obtain their views on cultural diversity.**Methods:** All Australian and New Zealand schools of optometry were invited to participate in the study. Data were collected with two surveys: a curriculum survey about the content of the optometric courses in relation to cultural competency issues and a survey for second year optometry students containing questions in relation to cultural awareness, cultural sensitivity and attitudes to cultural diversity.**Results:** Four schools of optometry participated in the curriculum survey (Deakin University, Flinders University, University of Melbourne and University of New South Wales). Sixty-three students (22.3 per cent) from these four schools as well as the University of Auckland participated in the student survey. Cultural competency training was reported to be included in the curriculum of some schools, to varying degrees in terms of structure, content, teaching method and hours of teaching. Among second year optometry students across Australia and New Zealand, training in cultural diversity issues was the strongest predictor of cultural awareness and sensitivity after adjusting for school, age, gender, country of birth and language other than English.**Conclusion:** This study provides some evidence that previous cultural competency-related training is associated with better cultural awareness and sensitivity among optometric students. The variable approaches to cultural competency training reported by the schools of optometry participating in the study suggest that there may be opportunity for further development in all schools to consider best practice training in cultural competency.

Key words: cultural competence, optometric education, optometric curriculum, optometric students

Australia and New Zealand are both culturally and linguistically diverse countries. Over 25 per cent of Australians were born overseas and 25 per cent of households have two or more languages spoken.¹ This is similar in New Zealand, where 23 per cent of New Zealanders were born overseas.² A large proportion of Australia's health workforce is also born overseas, including 36 per cent of optometrists.³ Australian and New Zealand born patients and optometrists may also demonstrate significant cultural variation, including Indigenous cultural backgrounds. Thus, optometrists and their patients are often from different cultural backgrounds and may hold different understandings about eye and health-care. A lack of awareness of cultural differences can result in mis-

communication and misunderstandings during clinical encounters, which can lead to poorer health outcomes.^{4,5} Research in health professions, including medicine and nursing, indicates that cultural differences can have a significant effect on clinical encounters and health outcomes.^{6–8}

A study conducted with optometrists in Victoria, Australia, identified that cultural diversity was important in the clinical setting, as it can influence how optometrists communicate and manage their patients.⁹ A key finding was that specific training and strategies to deal with culturally based differences in health beliefs and practices may be beneficial. Cultural competency training has been shown to improve the knowledge, attitudes and skills of health professionals.¹⁰

Cultural competency in health-care refers to the ability to provide care to patients with diverse values, beliefs and behaviour, including tailoring delivery to meet patients' social, cultural and linguistic needs.¹¹ Cultural awareness and sensitivity are components of cultural competency and involve an awareness of cultural issues, ability to interact with diverse cultural groups and sensitivity toward diverse beliefs and values. Cultural competency training is an approach to improving the provision of health-care to culturally and linguistically diverse (CALD) groups in the community by increasing the awareness, knowledge and skills of health-care providers and organisations and improving the effectiveness and accessibility of health services.¹¹ Students may benefit

from training at the undergraduate/pre-registration level, prior to clinical acculturation and adoption of cultural stereotypes.

The United States Association of Schools and Colleges of Optometry (ASCO) and its member institutions released guidelines for culturally competent eye and vision care in 2008, recognising the importance of diversity and multiculturalism in optometric education and in the profession.¹² The Optometrists Association Australia (OAA) competencies and Optometry Board of Australia's (OBA) 'Code of Conduct' also mention in their guidelines that cultural competence is important in optometric care.^{13,14}

There is little currently known about the extent to which cultural competency is addressed or planned to be addressed in Australian schools of optometry. While there are likely to be some overlapping issues between Australia and the United States, demographic and historical differences between the countries will likely result in the need for some variation to guidelines for culturally competent eye care within the Australian context. Information is needed to evaluate and identify any gaps in cultural competency in pre-registration optometric education in Australia and New Zealand. We conducted a pilot study to:

1. review how optometric courses and educators in Australia and New Zealand teach and prepare optometric students to work with culturally diverse patients and communities and
2. evaluate the cultural awareness and sensitivity of current students.

To our knowledge, this is the first study of cultural competency training in Australian and New Zealand schools of optometry.

METHODS

There are six schools of optometry in Australia and New Zealand (Deakin University, Flinders University, Queensland University of Technology, University of Auckland, The University of Melbourne and University of New South Wales). All schools were invited to participate in this cross-sectional observational study.

Two surveys were developed:

1. a curriculum survey containing open and closed questions about the content of the course in relation to cultural competency issues and
2. a student survey containing closed questions in relation to cultural awareness,

cultural sensitivity and attitudes to cultural diversity (Appendix I).

The curriculum survey was based on two existing questionnaires, the Tool for Assessing Cultural Competence Training (TACCT),¹⁵⁻¹⁷ which was developed for medical schools in the United States to examine components of their medical school curriculum in relation to cultural competency content/training and a questionnaire on the teaching of cultural competency in paramedic education courses in Australia.^{18,19} The curriculum survey developed for this study consisted of 40 questions (14 open and 26 closed) covering curriculum structure, teaching methods, co-ordination and teaching, cultural awareness content, student assessment and feedback and management of cultural competency training (under 'industry relationships' in the survey). It was largely drawn from the questionnaire developed by Spencer, Macdonald and Archer¹⁸ with an additional question included within the 'Content' section taken from the TACCT.¹⁶ Some of the questions were modified to make them more appropriate to the optometric context. For example, the original question 'Does the ambulance service in your state/territory/NZ have a cultural diversity committee?' was changed to 'Does the university department have a cultural diversity committee?'

The student survey was based on the Cultural Awareness and Sensitivity Tool (CAST),²⁰ with the only modification being that the word 'physician' was replaced with the word 'clinician' in two questions. The CAST survey was originally developed for undergraduate medical students and has been validated on a group of undergraduate medical students at a Canadian university.²⁰ Student participants were asked to respond to 25 statements on cultural awareness and sensitivity according to a five-level Likert scale (where 1 = strongly disagree and 5 = strongly agree). A total score (that is, CAST total score) was computed by summing the scores, such that the maximum possible score was 125, with the higher scores representing greater cultural awareness and sensitivity.

The curriculum and student surveys were completed by participants between April 2013 and July 2013. Agreement with the schools included provision of a report to each school at the completion of the project and that public reporting from the study would not identify data from individual

schools. The study adhered to the tenets of the Declaration of Helsinki and the design, recruitment, consent and procedures were approved by The University of Melbourne Human Research Ethics Sub-Committee (ID: 1239121.1).

Data collection

Each optometry school was invited to participate in the study via an email to the Head outlining the study and details of participation. For the curriculum survey, we asked the Head to nominate staff member(s) involved in curriculum co-ordination and teaching to complete a hard-copy survey. For the student survey, we asked the Head to nominate a staff member(s) to invite second year optometry students to participate. Second year students were chosen so that the two recently established courses (Deakin University and Flinders University) could be included and that the most advanced students across the courses could be compared. Students were invited to complete the survey online, which remained open for six weeks, with one to three reminders sent by the nominated staff member to students during that period.

Data analysis

The curriculum survey data were double-entered into a Microsoft Excel spreadsheet. Frequency distributions for quantitative data were generated. Qualitative data from the open questions were analysed by two researchers and summarised in narrative form.

The student survey data were analysed using version 20 of SPSS (SPSS Inc., Chicago, Illinois, USA). Data from participants with missing data were excluded from the data analysis. Characteristics of the students and data obtained from the questionnaire were analysed using descriptive statistics. Differences in CAST total score between schools were evaluated using analysis of variance with post-hoc comparisons (Bonferroni). In addition, for all schools combined, differences between various student demographic groups in CAST total score were evaluated using the t-test. Linear regression analysis was used to determine the important factors associated with CAST total score. The variables entered into the regression analysis included school, age, gender, country of birth, language other than English and prior cultural awareness training. Analyses were two-tailed and p-values less than 0.05 were considered statistically significant.

University	Name of course	Duration of course	Year established
Deakin University	Bachelor of Vision Science/Master of Optometry	3.5 years*	2012
Flinders University	Bachelor of Medical Science (Vision Science)/Master of Optometry	5 years	2010
University of Auckland	Bachelor of Optometry	5 years	1964
The University of Melbourne [#]	Doctor of Optometry	4 years	2010
University of New South Wales	Bachelor of Optometry/Bachelor of Science	5 years	1971

* Accelerated sequential program
[#] Masters level professional entry. (Original degree course commenced in 1972)

Table 1. Participating schools of optometry

Specific goals of cultural competency training.	Reasons for the inclusion of cultural competency training.
Develop effective communication with patients.	To better prepare students to meet the needs of all patients and avoid cultural misunderstandings.
Develop comfort examining and working with culturally diverse people.	To be able to work with culturally diverse colleagues in eye and related fields.
Raise awareness of cultural issues, particularly in the context of communication with patients.	Self-awareness and understanding of the values of others and differences.
Meet Optometrists Association Australia (OAA) competency 1.8.3.	Effective communication.
Meet university learning outcomes related to cultural 'literacy'.	Recognition of the growing need for the modern practitioner to be sensitive and competent in dealing with patients from different demographics. Meet OAA competencies for course accreditation and other related university learning outcomes.

Table 2. Selected goals and reasons for cultural competency training reported by schools

RESULTS

Four of the six invited schools of optometry participated in the curriculum survey: Deakin University, Flinders University, The University of Melbourne and University of New South Wales. In addition to these four schools, the University of Auckland also participated in the student survey. Time constraints prevented the staff from Optometry and Vision Science at the University of Auckland from completing the curriculum survey. Table 1 shows details of the participating schools of optometry.

Summary of curriculum survey results

Combined results for all schools are reported. Results are separated according to domain. Missing data have been excluded from the response rate calculations. The amount of data missing varied from several questions within one survey to approximately half the survey being unanswered.

CURRICULUM STRUCTURE

Three schools (75 per cent) reported that they include formal teaching on the topic of cultural competence as part of the core curriculum. Two schools (50 per cent) reported that cultural competency training was integrated across the curriculum. A representative selection of specific goals and reasons for inclusion of cultural competency training reported by participating schools is presented in Table 2.

TEACHING METHODS

The most common teaching methods used by three schools of optometry (75 per cent) to deliver cultural competence-related curriculum were: clinical placements in community settings, tutorial/group discussion, personal reflection journal and lectures by invited guests. In addition to these, other teaching methods considered successful for cultural competency training were: role-play games/activities, participation in student overseas externships and case studies.

CO-ORDINATION AND TEACHING

The co-ordination and teaching of cultural competency was the responsibility of an optometrist staff member for three (75 per cent) schools. All staff members responsible were reported as having a background or specific training in cultural competency training or a related discipline, for example, social and behavioural sciences; however, all schools reported that specific cultural competency training was not required of staff of the schools of optometry and only one reported that training was available.

CONTENT

No school reported a framework or theoretical model underpinning the teaching of cultural competency training. Participants from two schools reported being aware of the National Health and Medical Research Council's (NHMRC) Cultural Competency in Health: A Guide for Policy, Partnerships and Participation.²¹ The number of hours devoted to didactic teaching of cultural

Characteristic	All	School A	School B	School C	School D	School E
Response rate, number (%) (as a % of those enrolled at year 2 at each school)	63 (22.3%)	10 (14.5%)	12 (24.0%)	29 (26.3%)	3 (10.7%)	9 (16.4%)
Age, mean years \pm SD	21.2 \pm 3.7	19.1 \pm 0.6	25.3 \pm 1.7	21.4 \pm 4.3	19.0 \pm 1.0	19.1 \pm 0.8
Gender, number (%) female	44 (69.8%)	5 (50.0%)	8 (66.7%)	20 (69.0%)	3 (100.0%)	8 (88.9%)
Country of birth other than Australia/New Zealand, number (%)	22 (34.9%)	4 (40.0%)	8 (66.7%)	4 (13.8%)	0 (0.0%)	6 (66.7%)
Can speak a language other than English, number (%)	38 (58.7%)	5 (50.0%)	9 (75.0%)	16 (55.2%)	1 (33.3%)	6 (66.7%)
Have had previous cultural competency training, number (%)	17 (27.0%)	1 (10.0%)	2 (16.7%)	13 (44.8%)	0 (0.0%)	1 (11.1%)
Mean CAST, total score (SD) (maximum 125)	94.4 (7.2)	89.0 (5.6)	92.5 (4.3)	98.3 (7.3)	89.7 (1.5)	92.1 (6.5)

Table 3. Participant details and Cultural Awareness and Sensitivity Tool (CAST) scores

competency training in each year of the course varied between schools, in part because the curriculum development had not been finalised in the newer schools. For year 1, the range was one to 10 hours (three responses), year 2: one to six hours (three responses), year 3: one to two hours (two responses) and year 4: 10 hours (one response).

The evidence-base (that is, policies, documents or guides) that participants reported using to inform cultural competency training in their course consisted of:

1. NMHRC Cultural Competency in Health Report,²¹
2. University graduate attributes and
3. OAA competencies.¹³

Two of three schools who responded to questions on content reported teaching about specific CALD groups, including Indigenous Australians, East Asians and various others. Two schools reported plans to further develop cultural training in their course.

STUDENT FEEDBACK AND ASSESSMENT

Two schools reported formal assessment in cultural competency.

MANAGEMENT OF CULTURAL COMPETENCY TRAINING

No participants reported having a cultural diversity committee within their school.

SUMMARY OF STUDENT SURVEY RESULTS

Overall, 63 second year students (22.3 per cent) across Australia and New Zealand responded. Participant details and CAST scores are shown in Table 3. The mean age was 21 \pm 4 years. Students from School B were significantly older than students from the other four schools ($p \leq 0.03$). Females represented at least 50 per cent of partici-

pants from each school. The proportion of participants born in a country other than Australia and New Zealand varied from zero (School D) to 66.7 per cent (Schools B and E). Participants who spoke a language other than English varied from 33 (School D) to 75 per cent (School B). A significantly higher proportion (44.8 per cent) of participants from School C reported that they had received training in cultural diversity issues ($p = 0.04$). The question asked was: 'Have you ever received training in cultural diversity issues (for example, cultural sensitivity, cultural awareness) through [any] subject or course?'

The mean CAST total score for all students combined was 94.4 \pm 7.2. There was a statistically significant difference in CAST total score between schools ($p = 0.001$). Specifically, post-hoc comparisons revealed the difference between School C and School A was significant (mean difference was 9.3, 95 per cent CI, 2.6 to 16.1, $p = 0.002$).

For all students, there was no significant difference in mean CAST total score between males and females, between those born in Australia/New Zealand and those born in another country, or between those who do not speak a language other than English (LOTE) and those who do speak a LOTE ($p > 0.05$).

Linear regression analysis indicated that training in cultural diversity issues was a weak but significant predictor of CAST total score, after adjusting for school, age, gender, country of birth and LOTE ($R_{\text{square}} = 0.11$; $p = 0.01$). Students who reported having had previous training in cultural diversity issues scored higher on the CAST. School did not remain a significant predictor after adjustment for previous training ($p = 0.28$).

DISCUSSION

This study indicates that training in cultural competency is included in the curriculum of some schools but to varying degrees in terms of structure, content, teaching method and hours of teaching. The co-ordination and teaching of cultural competency were mostly conducted by a staff member, who was an optometrist and all were reported as having a background or specific training in cultural competency or a related area. General gaps identified by the curriculum survey were lack of student feedback and assessment on cultural competency training, no specific cultural competency training required of staff, no clear management of teaching of cultural competency training and absence of a framework or theoretical model underpinning the teaching of cultural competency training. However, some were aware of the National Health and Medical Research Council's 2006 publication 'Cultural Competency in Health: A guide for policy, partnerships and participation.'²¹

The profession's competency standards in relation to cultural competency could be strengthened to provide greater clarity and direction for the schools of optometry. While acknowledging that OAA's Universal and Therapeutic Competency Standards are presently under review, current 2008 guidelines make explicit reference to 'culture' in two instances:

1. providing culturally inclusive optometric services (standard 1.8.3) and
2. communication with patients which takes into account the cultural background of the patient (standard 2.1.1).¹³

Among second year students of optometry across Australia and New Zealand, training in cultural diversity issues was somewhat

predictive of cultural awareness and sensitivity (as measured by the CAST) after adjusting for school, age, gender, country of birth and a LOTE. This indicates that training can have an impact on students' cultural awareness and sensitivity, even in the early stages of their studies. However, it is unclear as to whether cultural competency-related training provided during the optometric program or prior to undertaking optometric studies was responsible for higher CAST scores, as this was not explicitly asked of participants. Schools of optometry could survey students during their course to determine levels of cultural awareness and sensitivity and whether scores are influenced by the type and extent of cultural competency training they received during their course.

Further research could involve conducting a comparative review/audit of the curriculum structure and content at each school or department of optometry according to a cultural competency checklist (for example, that aligns with the professional competencies of relevant accreditation bodies) and interviewing optometric educators to assess the degree of cultural competency training they provide within the course. A similar study was conducted recently by Marino and colleagues²² in relation to dental, medical and physiotherapy curricula at The University of Melbourne. They found that the schools of medicine and physiotherapy had developed an explicit focus on including cultural diversity and communication skills as a major and continuing element within their curriculum, using a multi-departmental teaching approach. In contrast, cultural competency content within the dental course was relatively under-represented and was not taught continuously throughout the curriculum, thus providing students with fewer opportunities to become culturally competent. Another related study was conducted by Denial, Hoppe and Carlson²³ at the New England College of Optometry in the United States to examine the faculty's knowledge of cultural competency and to evaluate their responsiveness to training. They conducted a cultural competency symposium involving 26 faculty members, where surveys were conducted before training and four months post-training. Statistically significant improvements in some aspects of cultural competency were found when comparing scores pre- and post-training.

Feedback from participants indicated that some parts of the curriculum survey were difficult to answer, as cultural competence was often not a clearly defined topic or subject and may be included by different educators across several subjects. In addition, the concept of cultural competence may not be clearly defined within the course itself.

Despite some difficulties engaging schools in the study, it is hoped that participation in the study and feedback through the report will:

1. raise awareness of cultural competency-related issues and provide an opportunity for students and educators to reflect on some of the key issues
2. provide a basis for future development of guidelines to advance cultural competency training, and
3. provide an opportunity for schools to share knowledge and strategies.

Limitations

This study has several limitations and hence, caution must be taken with the conclusions. The curriculum survey was completed by four of six schools, generally by one educator/academic staff member. One issue is that some data were missing from schools. It is also important to note that as in some schools their courses are still in the developmental stage, so some questions were difficult for those schools to answer. An independent review/audit of policies and documents rather than self-report would be a more desirable method; however, this did not occur due to time and resource constraints. The student survey had low response rates from all schools and only one cohort of students was surveyed at each school. The student groups were not age-matched, given course entry ages are typically different for the Bachelor courses compared with the Masters courses. Therefore, generalisations cannot be made about the broader groups of students surveyed and the broader optometric student population. This was a cross-sectional study, which only provides a 'snapshot' in time of some individuals. It is possible that CAST scores may change as students obtain more clinical experiences and receive more teaching content in relation to cultural competency.

CONCLUSION

This study identified that there may be gaps and limitations in cultural competency training

in some Australian and New Zealand schools of optometry and that specific training for optometric students in cultural diversity may have a positive impact on students' cultural awareness and sensitivity.

In addition, this study provides some evidence that previous cultural competency training is associated with better cultural awareness and sensitivity among optometric students. The variable approaches to cultural competency training reported by the schools of optometry participating in the study suggest that there may be room for further development in all schools to consider best practice training in cultural competency.

The promotion of a culturally competent system of eye care is important for enabling better eye health outcomes for the community. We recommend that schools adopt a cultural competency framework or best practice guidelines (for example, NHMRC 'Cultural competency in health: a guide for policy, partnerships and participation'²¹ and/or the ASCO guidelines for culturally competent eye and vision care¹²) to assist in guiding the implementation of cultural competency training content and approaches.

ACKNOWLEDGMENTS

This project was partly funded by the Victorian Optometrists Training and Education (VOTE) Trust, Australia. We appreciate the contribution of the schools of optometry, Heads of School, staff and students through participation in the project.

Authors SB and DG are staff members of schools of optometry involved in the study. They were not involved in completing the curriculum survey and were not involved in recruiting students for the student survey. They did not handle any of the raw data.

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APPENDIX I

Curriculum Survey

Top of Form

Curriculum structure

Please tick: Yes No
 Does your course include formal teaching in the topic of cultural competency?
 Is the topic a part of the core curriculum?
 Is the topic an elective subject?
 Is the topic an identifiable, stand-alone unit/subject within the course?
 If yes, what is the title of the unit/subject?
 Is the topic integrated across the curriculum?
 What are the specific goals of cultural competency training in your course?
 What three reasons are the most important for the inclusion of cultural competency training in your curriculum?
 Additional comments:

Teaching methods

How is the topic delivered? Tick Tick
 Select all relevant answers

Lectures/seminars	Clinical placements in community setting
Films/videos	Tutorial/group discussion
Problem-based learning (PBL)	Case-based learning/case studies
Oral case presentations	Personal reflection journal
Role play/games	Guest lecturers
Online/web-based	History taking
Visits to cultural events/activities/agencies	Other

 Of the teaching methods identified above, which in your view are the three most successful?
 Why do you believe that these teaching methods have proved most successful?
 Additional comments:

Co-ordination and teaching

Please tick: Yes No
 Is the identified staff member for this content area an optometrist?
 If no, please specify profession/background
 Is the identified staff member a member of your department?
 If no, is the staff member from another department in your institution?
 If yes, please specify
 Does the identified staff member have a background or specific training in cultural competency training or a related discipline, e.g. multicultural studies, social and behavioural sciences?
 If yes, please specify
 Is specific cultural competency training available for staff in your department?
 Is specific cultural competency training required of staff in your department?
 If yes, what are the requirements?
 Additional comments:

Content

Please tick: Yes No

Does the cultural competency content have a framework or theoretical model to underpin the teaching of cultural competency training?

Please provide details:

What evidence base (i.e. policies, documents or guides) is used to inform cultural competency training in your course?

Is there teaching about specific ethnic groups?

Which ones:

Are the following addressed in your course? Select all relevant answers: Tick Tick

Definition of cultural competence	Epidemiology of health-care disparities
Definitions of race, ethnicity and culture	Factors underlying health-care disparities
Clinicians' self assessment and reflection	Demographic patterns of disparities
Epidemiology of population health	Collaborating with communities
Patients' healing traditions and systems	Differing values, cultures and beliefs
Institutional cultural issues	Dealing with hostility/discomfort
History of the patient	Eliciting a social and medical history
History of stereotyping	Communication skills
Bias, discrimination and racism	Working with interpreters
Effects of stereotyping	Negotiating and problem-solving skills
History of health-care discrimination	Diagnosis and patient-adherence skills

Are there other relevant topics addressed in your course that are not listed?

Is your department/school undertaking any research on cultural competency training, cultural awareness/sensitivity or involving participants from culturally and linguistically diverse groups? Please note them here. Yes No

Are you aware of the of The National Health and Medical Research Council's 2005 publication Cultural Competency in Health: A guide for policy, partnerships and participation?

If cultural competency training is in the curriculum at your institution, please use the rating scale to indicate the extent to which you address the following NHMRC attributes in your course.
1 = to a large degree; 2 = to some degree; 3 = to a minimal degree; 4 = not at all

Please tick: 1 2 3 4

Acknowledgment of the importance of cultural understanding to achieve effective communication

Confidence in students' ability to communicate effectively with CALD* background groups

Ability to advocate with and/or on behalf of clients and their communities

Recognition and respect that communities are their own cultural experts and facilitate a community development approach

Appreciation that many people from CALD backgrounds need to involve family and community in discussions about health-related issues

Comfort with involving an interpreter to assist in communication

Appreciation of the effect of differences in culture, language and migration experience and the potential impact this may have on health promotion programs

The ability to share experiences with other health professionals while respecting confidentiality

The students have undergone a process of self-reflection to understand the impact of personal cultural identity on his or her practice

A commitment to undertake continuing professional development to develop the necessary skill set to foster cultural competent practice

Duration

How many hours are devoted to didactic teaching of cultural competency training in each year of your course?

Year 1 _____
 Year 2 _____
 Year 3 _____
 Year 4 _____

Additional comments:

Student assessment and feedback

Please tick: Yes No
 Is formal assessment in cultural competency training a requirement?
 If yes, what forms of assessment are used? Select all relevant answers:
Tick Tick

Written exam Oral presentation
 Reflective journal Case study analysis
 Project report Other:

Please tick: Yes No

If clinical placements are undertaken in the community setting, is there specific assessment of cultural competency training (i.e. knowledge, awareness and skills) within the clinical placement assessment?

In your view, what are the students' three major reactions to their learning and experience in cultural competency training?

Please tick: Yes No

Is there a formal survey of student satisfaction of cultural competency training?
 Are there plans to develop or further develop cultural training in your course?

If yes, in what way?

Additional comments:

Industry relationships

Please tick: Yes No

Does the university department have a cultural diversity committee?
 Does the university faculty have a cultural diversity committee?
 Does the registration board require cultural competency training in optometry pre-registration courses before employment?
 Do you have any measure of the impact of cultural competency training on optometry clinical practice at the completion of the course?

If yes, please provide details:

Additional comments:

Please provide any further relevant comments in reference to cultural training of optometric students below:

Thank you for taking the time to fill in this survey.

Student Survey

Please answer the following questions about cultural knowledge and awareness.

The scale for the questions is: 1 = strongly disagree

2 = disagree

3 = neutral

4 = agree

5 = strongly agree

Please put a tick or cross in one box only:	1	2	3	4	5
1. I would feel comfortable working with people from cultural or ethnic backgrounds different from my own.					
2. People from different cultures may define the concept of 'health-care' in different ways.					
3. Race is the most important factor in determining a person's culture.					
4. Understanding a patient's cultural background will help me provide better care as a clinician.					
5. I feel comfortable evaluating situations from different cultural perspectives.					
6. Learning about beliefs and values held by individuals of another cultural background is interesting for me.					
7. Knowing about different cultural groups improves my ability to interact with others.					
8. It is challenging for me to interact with individuals from a different cultural background than my own.					
9. For a clinician, a patient's cultural perspective is secondary to other issues in the provision of good quality care.					
10. Cultural groups differ in the ways in which they interact with members of their own culture versus other cultures.					
11. I am aware of prevailing beliefs, customs, norms and values of other cultural groups.					
12. When I am surrounded by culturally diverse individuals, I feel that my own beliefs and values are being threatened.					
13. Learning about alternative/non-Western medicine and traditional healing practices is an important part of clinical training.					
14. Cross-cultural barriers between the patient and clinician can lead to negative consequences for clinical care such as longer appointments, non-compliance and unnecessary testing.					
15. In conversations, I am attentive to non-verbal cues and culturally specific gestures.					
16. Culturally influenced spirituality and religious beliefs are important aspects of a patient's decisions around their health.					
17. I reflect on and examine my own cultural background, biases and prejudices related to race and culture that may influence my behaviour.					
18. I respect the decisions made by my friends and colleagues when they are influenced by their cultural backgrounds, even if I disagree.					
19. Many aspects of culture influence a person's decisions and perceptions about health and health-care.					
20. The ease with which patients can communicate with their clinicians varies across cultures.					
21. I am knowledgeable in the area of ethnic pharmacology (variation in medication responses in individuals of different ethno-cultural backgrounds).					
22. I am comfortable discussing racial or cultural issues with my friends and colleagues.					
23. I am aware of specific health risks faced by people of varied cultural and ethnic backgrounds.					
24. I would feel uncomfortable working with a colleague who makes derogatory remarks toward individuals of a particular cultural background.					
25. When I come in contact with individuals from another culture, I adapt my behaviour in accordance with my understanding of their culture.					

Thank you for taking the time to fill in this survey.

Please contact your school department or student counselling service, if you wish to discuss any issues arising from the survey.

If you wish to contact one of the study's researchers, email Mandy Truong on mtr@unimelb.edu.au or feel free to write any comments below:
