Perspectives on audiology training and education in Canada and New Zealand

In this edition of Trainee Matters we look at audiology training in two different locations from around the world, **Canada** and **New Zealand**. **Marshall Chasin** gives us an overview of the education system in Canada, while **Amy Arrowsmith** explains the history of audiology training in New Zealand.

**CANADA**

The term ‘Audiologist’ is protected under many provincial regulatory colleges of audiology (and speech-language pathology) but the scopes of practice for an audiologist throughout Canada may differ from province to province and between the three territories. Healthcare in Canada is regulated provincially with some policies provided nationally. In Canada, the only entry into the professional field of audiology is at the master’s level. Currently there are five full-time only professional and clinical audiology programmes – two in French – all of them in conjunction with speech-language pathology departments. In total, there are 11 Canadian speech-language pathology programmes.

Requirements for regulatory licensing / registration in audiology may vary from province to province in Canada and this is mandatory in order to practice. Currently, audiology is regulated in eight provinces in Canada. Membership in Speech-Language Audiology Canada (SAC), the national professional association representing audiologists, speech-language pathologists and communication health assistants, is voluntary. SAC administers a clinical certification programme. To become clinically certified with SAC, an audiologist or speech-language pathologist (including graduating students) must meet all educational and clinical requirements as well as pass SAC’s clinical certification exam. Although SAC clinical certification is voluntary, some employers do require it as a term for employment. For more information, visit SAC’s website, www.sac-oac.ca.

The Canadian Alliance of Audiology and Speech-Language Pathology Regulators (http://www.caaspr.ca/) oversees development of common standards among the provincial regulators.

**English and French clinical and professional audiology programmes**

The English-only audiology programmes are available at Dalhousie University in Halifax, Nova Scotia, Western University in London, Ontario (formerly known as the University of Western Ontario) and the University of British Columbia, Vancouver, British Columbia. These three programmes are in the eastern part of Canada, central Canada, and western Canada, respectively.

In addition, the two French only professional audiology programmes are at Université d’Ottawa, in Ottawa, Ontario and Université de Montréal, in Montréal, Québec. Despite these programmes being taught in French, graduates typically are conversant in English as well. Many of their textbooks are written in English.

Although the University of Alberta, in Edmonton, Alberta does not offer a clinical or professional degree in audiology, they do have research programmes that can offer an emphasis on audiology or hearing science. Doctoral level programmes in Canada vary by institution and many follow an interprofessional model and may be housed in a different department such as psychology or rehabilitation medicine.

Currently the universities listed previously offer a PhD programme in some form, for both full time and for part time students, but typically in association with another academic department such as rehabilitation medicine. The latest federal statics indicate that there are only ten PhD graduates in this area from all Canadian universities each year. No Canadian university offers a doctorate in audiology (e.g. AuD) programme although many Canadian institutions have research programmes in audiology.

“In addition to the academic preparation, all Canadian professional and clinical programmes in audiology require that the applicant have some volunteer experience in the field.”
completed their bachelor’s training if the master’s level applicant has not requires proof of French language one or more academic references. from the volunteer supervisor, as well as volunteer experience in the field and in clinical practicums) from that institution. The other English speaking universities may require their own proof of language competency, on a case by case basis.

The academic and clinical length of the programmes is typically 24 months long, with the exception of the Université de Montréal’s programme which is only 12 months long and Dalhousie University which is three years in length. Special considerations can be made for many students who may need to take an additional year of study if they do not have the requisite courses when they apply to the master’s programme. This 24 month period includes the required coursework and clinical externships that are necessary for their training as well as to meet any provincial regulations for registration/licensure and eligibility for SAC membership and certification. Currently all Canadian programmes offer an optional thesis (and in some cases, this would be instead of writing comprehensive exams). Alternatively some programmes would require an extensive comparative literature review (Western University and the Université de Montréal), or a research project (Dalhousie University, Université d’Ottawa and the Université de Montréal). Three Canadian universities offer a research master’s degree that will not lead to registration/licensure as a clinical or professional audiologist. These all require a thesis and are 24 months in length. The universities that offer such a degree are Western University, University of Alberta, and Université de Montréal. Throughout Canada, based on the most recent statistics, there are fewer than 10 candidates in this non-clinical category, and some of these students are studying some other aspect of rehabilitation sciences and not just audiology.

Clinical placements or externships are required of all Canadian programmes. Between in-house supervision and externships the students must have 350 hours of supervised clinical practicum for a student to graduate. Of the reasons for difficulty in obtaining clinical externship placements, the three most commonly cited appear to be related to not enough placements for the student body, lack of funding for those placements away from where the student lives, and lack of fluency in both Canadian official languages depending on where the placement is. For the last year that there are statistics for all five Canadian programmes, there were 80 spots available across Canada and nearly 300 applications. The number of students accepted each year ranges from 13 (Dalhousie University) to 30 (Université de Montréal). This is certainly increasing throughout Canada as more and more young people become more aware of the field of audiology. An informal survey indicated that currently there are approximately 6-8 applicants for each student space.

Like all professional groups, in Canada and around the world, continuing education is a requirement for maintenance of one's certification. A 2010 survey, performed by SAC of all five professional and clinical audiology programmes in Canada can be found at http://sac-oac.ca/sites/default/files/resources/university_survey_%2010_audiology_0.pdf. 

FURTHER INFORMATION 
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Canadian clinical and professional audiology training programmes (E: English; F: French)
Western University http://www.uwo.ca/fhs/csd/ (E)
University of British Columbia http://www.audiospeech.ubc.ca/ (E)
Dalhousie University http://www.dal.ca/faculty/healthprofessions/human-communication-disorders.html (E)
Université de Montréal http://www.eoa.uMontréal.ca/ (F)
Université d’Ottawa http://www.sante.uottawa.ca/esr/audio/index.htm (F)
(or 45 over a three year period). These continuing education credits can be obtained from a wide array of activities ranging from conferences to journal clubs. Canadian Audiologist (www.CanadianAudiologist.ca) is the official publication of the Canadian Academy of Audiology and lists an assortment of events that can assist in obtaining continuing education credits for audiologists. SAC also has a professional journal, CJSLPA, which can be accessed at http://sac-oac.ca/professional-resources/canadian-journal-speech-language-pathology-and-audiology. The link to SAC’s professional development section is http://sac-oac.ca/news-events/coming-events.

NEW ZEaland

This year the New Zealand audiology profession and Auckland University celebrate 25 years of developing their own audiologists. This article will provide an overview of hearing professionals in New Zealand, briefly chart the history of audiology training in New Zealand and then focus on current education and training programmes which make New Zealand trained audiologists so highly respected across the world.

Hearing professionals in New Zealand

There are primarily five groups of non-medical professionals working to improve the lives of hearing impaired New Zealanders: audiologists, audiometrists, hearing therapists, advisors on deaf children / resource teachers of the deaf. Although the latter three professions provide extremely valuable services, this article will focus on audiologist and audiometrist training and education. The majority of audiologists hold a postgraduate qualification in audiology (predominantly at the master’s level), and work in both the private and public sector. Audiometrist qualifications and training backgrounds are more diverse and range from informal training, certificates, diplomas and undergraduate degrees in audiology. All formal audiometrist qualifications are obtained abroad and most audiometrists work in the private sector.

A historical glimpse at training

In 1973 an ‘Audiology Scholarship’ was set up by The Hearing Association and Department of Health which allowed two individuals to study in Australia for a year and complete a postgraduate diploma in audiology. The scholarship scheme expanded and continued until 1989, and then in 1990 the University of Auckland set up its own Master of Audiology training programme. In contrast to many other programmes across the world at this time, New Zealand took the stance that they wanted a two-year master’s programme as the entry qualification into the profession. Dr Bill Keith, a key figure in setting up the audiology scholarship and the master’s programme, believed that

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Declaration of competing interests

None declared.
Hands on clinical supervision at University of Canterbury.

The spectacular Southern Alps and lakes in New Zealand.

Audiologists had to have experience of research if they were to become “critical consumers of science and life-long learners.” Bill was very much influenced by the strong audiology research community in North America where he completed his PhD and quotes the mantra of James Jerger, “no research, no profession”.

The decision to promote graduate entry into the profession resulted in few resources being put into training and upskilling of those who were already working in the field but had no formal qualifications. Technicians, who later became known as audiometrists were either trained on the job, accessed short intensive workshops or completed what is now known as the TAFE Diploma of Hearing Device Prescription and Evaluation, run through Western Sydney Institute in Australia.

Current training

Today a fully qualified audiologist is required to complete a New Zealand Audiological Society (NZAS)-endorsed two year Master of Audiology, run by the University of Auckland and the University of Canterbury, plus a Certificate of Clinical Competence (CCC), which the NZAS manages. NZAS is the national body that “governs, advocates, regulates and ensures high professional standards in audiology”.

The two master’s programmes include 80 weeks of academic work plus a minimum of 250 hours of ‘direct contact’ clinical training. Both programmes integrate theory with practice, with students completing campus-based practical classes and clinical placements whilst learning the theory. Both programmes offer diverse clinical placements with students experiencing both public and private audiology practices. In addition students get exposure to more specialised areas of work including the assessment of auditory processing disorders, tinnitus assessment and rehabilitation and cochlear implantation.

The University of Auckland Programme Director, Dr David Welch says their programme aims to develop professionals who are “self-motivated, who will practise audiology from their own understanding, can adapt to changes in the environment, and can pursue their own goals in the diagnostic approaches they take, the treatment of patients, or audiological research”.

Associate Professor Greg O’Beirne, the Programme Director for the University of Canterbury programme believes one of their programme’s strengths is that it develops clinically able students who are able to hit the ground running upon entering the workforce. A recent programme restructure sees greater alignment with Australian Master of Audiology programmes and completion of the theoretical curriculum in the first year rather than being spread over two. The rationale for this was to ensure greater alignment of theory to practise and to free up the second year so students could focus on their research thesis and consolidate their clinical skills prior to entering the workforce.

The Certificate of Clinical Competence
“A rigorous system for continuing education and peer review processes is crucial to ensure clinical proficiency and life-long learners.”

SUMMARY

A two year Master of Audiology degree plus a Certificate of Clinical Competence is the recognised route of entry in order to become an NZAS audiologist. NZAS’s move to govern audiometrists and provide an educational framework to ensure consistency of knowledge and skills is positive both for the profession and hearing impaired public.

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Further information

New Zealand Audiological Society

University of Auckland Audiology

University of Canterbury The Master of Audiology Degree http://www.cmds.canterbury.ac.nz/courses/maud.shtml

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