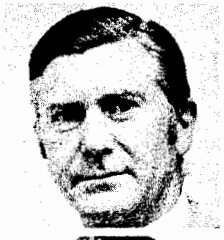
Conversation: speech pathology and audiology in Canada

Six Canadian universities offer programs in speech pathology and audiology. Faculty members from three of them met recently to discuss the "state of the profession," Participating were **Daniel Ling,** *PhD, Chairman, and* **Fred Skalny** *(PhD, recently Assistant Professor, School of Human Communication, McGill University, Montreal;* **Allan Kroll,** *PhD, and* **William Yovetich,** *MA, both Assistant Professors, Program in Communication Disorders, University of Western Ontario, London; and* **Einer Boberg,** *PhD, Chairman, and* **G. David Zink,** *MA, recently Assistant Professor, Division of Speech Pathology and Audiology, The University of Alberta, Edmonton.*



Ling

Yovetich

Ling At McGill, we are pretty firmly convinced that there are tremendous advantages to sticking to a graduate program, one of the greatest reasons being that, as a graduate program, we are in a position to select our students on the basis of proven academic talent abilities. We are able to take about 10 per cent of the people applying to us, and accordingly, we have very high calibre students. We can have a really intensive program in both audiology and speech pathology, and produce the type of people who can work on their own initiative. I think that we have to have this type of student in Canada, because so many people are thrown into areas where they have to function entirely on their own resources.

If we do produce people like this and we aim at a master's degree

level throughout, then we have to look carefully at the type of work these people have to do and the supporting personnel that have to be trained to help. Take audiology for example. Here we have really high level personnel and, if you are not very careful, what they are going to do is a technician's task, because there is no one else to do it. They are going to be called upon to do routine screening tests, pure tone, air and bone, and the routine diagnostic tests which could be done by a technician under supervision. Then they will have very little time to do specialized testing and very little time for aural rehabilitation. So, we have to give a great deal of thought to the type of supporting personnel that we are going to provide. You can have the two levels of people, one really highly trained and the other who has a very much lower level of training. Really, a six-week intensive course could make them into excellent supporting personnel for audiology. We also need a master's degree in speech and we have talked a great deal about the way we could produce supporting personnel in speech. We don't think this is quite as easy, and so we see two levels in speech, a master's level and a bachelor's level, the bachelor's level being much more supporting personnel.

Skalny There are other basic issues in speech. If we consider people in our profession as speech pathologists or audiologists, what is the minimum training we should be striving for? If we establish a minimum training level at the undergraduate level, this then gives the BA license to go out and practice as a so-called certified professional person . . . deal with any problem they come across. The question is, are they competent to handle all the kinds of problems they are going to face? Should they not have a very broadly defined background at an undergraduate level and then an intensive two-year training program at the graduate level by which time they could proceed very quickly to learn the very specialized skills required to perform their professional responsibilities. I cannot see the role of a technician in terms of speech pathology. Yes, I see a lot of problems there that lend themselves very easily to certain types of behaviour modification techniques which a technician can handle. However, we are still dealing with people, and I don't think this lower level of training qualifies the person in a one-to-one interaction situation to handle

Kroll

Boberg

Zink

problems that could develop or prepares them to promote success in a therapy situation. Supervision has to be extremely close by a senior therapist of at least a master's level.

Kroll Don't you think, Dr. Skalny, that you could provide students with a liberal undergraduate degree and still give them some basic professional training at the same time? Don't you think that there is room for an undergraduate major in speech pathology? Then provide more intensive training at the graduate level after the student has got through a lot of introductory work which he can handle along with other courses in common areas, such as psychology, sociology, anatomy, and what have you, in social sciences?

Skalny Truthfully, no, I think an undergraduate program in the area of communication is redundant if they're to go on for advanced training.

Résumé en français

Quelques membres des corps enseignants de trois universités canadiennes se sont réunis à Montréal pour échanger leurs vues sur la profession d'orthophonie. Les participants étaient **Einer Boberg** et **David Zink** de l'Université de l'Alberta; **Daniel Ling** et **Fred Skalny**, de l'Université McGill; et **Allan Kroll** et **William Yovetich**, de l'Université Western Ontario.

Les sujets de discussion englobaient: l'instruction supérieure et celle des étudiants non diplômés; la standardisation des programmes d'instruction; l'emploi de personnel de support; et les plans d'avenir pour les programmes à l'Université McGill, à l'Université Western Ontario, et à l'Université de l'Alberta.

La discussion a commencé par un échange des vues concernant le niveau d'instruction des orthophonistes. Ling et Skalny estiment préférable un programme libéral joint à un programme supérieur en orthophonie. Pour leur part, Kroll et Yovetich préfèrent une combinaison des spécialisations premières et supérieures, alors que Boberg soutienne qu'on n'a pas encore démontré la nécessité d'une instruction supérieure.

Zink souligne qu'un individu avec un diplôme de bachelier de l'Université de l'Alberta ne serait pas assez préparé pour devenir un audiologiste.

Kroll demande si la standardisation des programmes d'instruction partout au Canada serait avantageuse. Skalny affirme l'importance de discuter un niveau minimal de compétence, mais il espère que cela ne conduirait pas à une licence nationale.

Kroll et Ling disent que le niveau minimal doit être établi par la "profession au Canada," les professeurs contribuant à cette décision comme une partie de la profession. Yovetich affirme qu'il est important que ce niveau soit établi par les membres de la profession, et non pas par les ministères de la santé.

Tous, sauf Boberg, estiment que le niveau minimal d'éducation pour le spécialiste indépendant doit être la maîtrise.

Ling discute de l'emploi du personnel de support; il dit que cette assistance peut être utilisée mieux en audiologie qu'en orthophonie. Il suggère l'emploi d'un orthophoniste ayant sa maîtrise, et d'un aide au niveau de bachelier comme personnel de support.

Zink fait remarquer le danger qu'il y aurait à engager un technicien au lieu d'un audiologiste s'il n'y aurait pas de restrictions sur le personnel de support. Ling dit que ce danger se trouve dans le Québec, puisque le Ministre de la Santé désire une système dans lequel la personne la moins qualifiée soit dans la majorité.

On discute l'avenir de chaque programme académique. Ling parle de l'éventualité d'une implication dans l'enseignement des instituteurs des sourds; Kroll et Boberg disent qu'on considérerait les programmes supérieurs de maîtrise à leurs universités réspectives.

Ling At McGill we are terribly keen on not just training the master's level people, but also the PhD, and we need a great deal of work if we are to become a good solid Canadian profession. We need to contribute a great deal more than we are doing towards breaking down the barriers to knowledge and pushing knowledge forward. This means that all of our schools must be very conscious of the need to develop people capable of doing research. We are not just interested in their doing research but also in filling in their background and supplementing their thesis work.

Skalny I think we might even look at our profession historically . . . at programs in the United States, in particular . . . and talk about the clinical programs that are providing the services. We are still befuddled by a lot of the problems in terms of how to correct some types of disorders. We have been going in one direction when we are not even sure this is the direction we should be following, but very seldom do we stop and ask ourselves, "Should we take another direction here?" This tells us something of the training institutes.

I think we are essentially saying that we are trying to mass produce people to go out and fill a position because there is a vacancy, and perhaps, because there is some federal and/or provincial pressure to have these people.

Ling In short, I don't think that we can produce evaluative therapists at an undergraduate level.

Yovetich I would like to hear you explain how it is that in the two-year master's program you can teach clinicians to be more evaluative than you could in three years of undergraduate training. What do you feel is the crucial difference between these two levels of people?

Ling I think that when you have a graduate program, you have the ability to select really first rate people. When you are limited to an undergraduate program, some of these people are just going to scrape by. This happens with all undergraduate programs. These people are going to come out and there will be some good people just as there are in all undergraduate programs. It is not just that our graduate students will have had basic degree work in psychology or related sciences, but they would have covered a great deal of general background first; one is then able to include in the graduate program much more

training in evaluative work and much more training in research.

Yovetich Wouldn't you feel also that if you had a person who came through an undergraduate major, or say, an honors program in speech pathology, and then went on to the master's level, you would have an even better opportunity to train this individual? You said earlier that you feel it is redundant to come from an undergraduate program in speech pathology, and go on to a graduate program. I don't really agree with that.

Skalny If you offer an undergraduate degree, you are causing this individual to look at speech, hearing, and language at an early age in his academic training. You are automatically restricting him from taking a wide variety of related coursework or gaining a lot of knowledge in related areas, for example, linguistics, psycholinguistics, neurology, and psychology.

Yovetich But couldn't you have this incorporated in your program? Why would you have to be so rigid?

Ling No, I don't think that is the point that Fred [Skalny] is trying to make. If the student is going to start at the undergraduate level in his training, he has to make a choice at a very early age. When he makes a choice to go into a field at the graduate level, he is a more mature person making this choice. Now, you may disagree with this, but the fact is, if you examine the wastage rate of people trained at a master's level and people trained at a bachelor's level you are going to find that the wastage rate is significantly less when people are trained at the master's level. This has been published in *Asha*. I think that this is a very good indication that people are making decisions before they are sufficiently mature to do so.

Boberg How do you relate this to other fields like law and medicine? You say that they are unable to make this choice.

Ling No, I think that's not true. You see, law and medicine are very different professions. If you qualify as an MD, you have a fantastic range of things that you can do. You can become a medical journalist or do research in medicine. You can specialize in various parts of the anatomy. You can also specialize in public health or go into epidemiology—the world is your oyster.

You are not really making a final choice when you are going into a field like medicine, and the same thing holds true for law. There are

many, many alternatives. Now, our field is more limited than that. When you choose to be an audiologist, you choose to be an audiologist.

Kroll But supposing you go into an undergraduate program you can still change after two years and not be significantly affected. I agree very much with what you said about the extra maturity of graduate students—and they are better able to treat—but I do wonder about the assumption that the undergraduate degree is more redundant and that you can't produce any sort of evaluative method, nothing but a technician. And another point that I was wondering about. . . .

Skalny I don't think we are driving at that.

Ling No, we are not saying that. We are saying. . . .

Skalny It is more a clinician that comes out of the undergraduate level, and if that is her terminal level, she is, I think, restricted in many, many ways. I think this is the only generalization that we are trying to point out.

Ling And we are not saying that you should only train at the graduate level. We are saying that we need a substantial number of people at the graduate level, and we have already talked about supportive personnel, and maybe supportive personnel in speech might be the bachelor level people.

Kroll I think that it would be somewhat difficult to say to an employer that here is a person "X" who has spent four years in an undergraduate program, and this person can only function as a technician to be supervised by one who has spent two years in (admittedly) a more intensive program. Therefore, it is saying very clearly, that bachelor people are only technicians. I think we are. . . .

Yovetich I don't think that I was advocating the BA level as the terminal level. By no means. I feel that the MA level is going to produce professionals. I think the MA should be the professional degree. However, I don't feel that purely a two-year graduate level program (I don't care how intensive it is) is going to produce as good a clinician as a person who has had five years of training. He has been exposed more. He has been supervised more.

Skalny Yes, but in terms even of supervision, someone doing initial observations in the clinical situation, who has very little background as to what he should be observing, will obviously come out with restricted

observations made in that situation.

If we have a strong Canadian Speech and Hearing Association, this is a project that this association could undertake: to evaluate the level of competence in the person coming through a two year master's degree training program only, in contrast with someone who has come up through an undergraduate program as well as a graduate program. It is hard to evaluate.

Yovetich My impression is based on the fact that I just finished three years of working in Iowa where they follow the ASHA tradition right down to the point where the students come out with a speech science degree at the BA level. They don't see a client until perhaps the last semester and they get to maybe "fool around" with an articulation problem. They get observations; then they go on to the graduate level.

Iowa is very select in their graduate students, who require from a year and a half to two years for their MA depending on the individual. The requirements for academic achievement are quite high and there is considerable exposure to clinical cases, directive supervision, and observations. But it is the common complaint from graduate students, as well as faculty people, that it is just too intensive; it is too short. Mind you, they get pretty darn good evaluative or thinking clinicians. I question whether they are as good as a number of their fellow students who came from clinical programs and went into their MA level as "thinking clinicians." That's again my feeling.

Skalny You felt that it was too short a term?

Yovetich Yes, in terms of time and energy. I am talking about their attention clinically. They could just not possibly be exposed to as many clinical hours—they got their 275 hours as required, but I really question the quality of their 275 hours. They get a little bit of everything but that's all they ever get—a little bit.

Boberg Are you suggesting, Bob, that there is a passage of time that has to take place in order to. . . .

Yovetich No, not so much time. Well, perhaps time would have to be a factor, but I question right now the amount of actual clinical exposure that ASHA requires—this 275 hours. I just don't think it is enough even at the graduate level.

Kroll How many clinical contact hours do the McGill students end up with?

Skalny Practicum would be approximately four hours a week for 14 weeks; 96 hours before they go on to their four months internship which is five days per week straight for four months. So the numbers would add up . . . it would have to be close to 500 hours of work, or over.

Kroll When does the four-month internship come?

Skalny At the completion of their course work in their second year.

Kroll Before or after the master's is awarded?

Skalny Before; just before. They have to complete their internship before they can be awarded a master's.

Yovetich How is this done?

Skalny They assume a semi-professional role. They work as supervised personnel in hospitals for a four-month stretch of time, straight through.

Yovetich What type of patients do they get during the internship? Do they get quite a varied experience?

Skalny All sorts.

Yovetich Is this directed? Is each student's experience planned?

Ling Everything is planned and executed by the school.

Skalny Yes, actually we have the intern staff and the teaching staff together to discuss the scheduling and to discuss the requirements, the role of the supervisor, when should the students start assuming the full responsibility, and reports as to how they are progressing.

Boberg How much did you say they got before internship? A four month period?

Skalny It was approximately 96 hours of introductory practicum.

Boberg During the four month period they get about 480 hours, if you consider 30 hours a week. Alberta students will end up with about 550 hours; McGill would end up with about 600.

Kroll 550 hours in just the undergraduate program?

Boberg Yes, this is just the undergraduate program. With the graduate program. . . .

Skalny But you see they go into it again. I don't know what your academic contact is in terms of the courses you offer in Alberta, but before internship begins our students obtain all kinds of information in terms of speech perception; they have a good, clear explanation and understanding of theoretical foundations so internship becomes in one sense a more stimulating experience for them. They even have a

choice to go in with some clinical theoretical rationales to know why they are doing something or to know that they should change to another rationale.

Ling One of the things we have been working on very hard in order to meet your point is that it is not really the amount of time that you put in, but what you put into the time. In terms of our practicum, we have improved our record enormously, and we are still improving because a great deal of staff time is spent in upgrading the health care provision of speech and hearing in all of our hospitals. We now have two of our four major teaching hospitals headed up by PhD people who are actually involved in supervision and clinical work. These people are appointed at a part-time assistant professor level, so more and more the quality of our practicum has improved.

Boberg How do you handle a graduate from Alberta or from Western Ontario who applies to your program?

Ling If he applied at a bachelor level and he wanted to come in our program? Well the prerequisite would be a first rate academic record which means either an A or top B . . . first class or top second class standing. We would look over his record, pinpoint any areas of weakness and particular areas of strength or interest, and put this person through primarily a research degree course. We have accepted a number of people who have qualified at the bachelor level and have found that this "evaluative thing" is not there. Their need is to understand how to read research in order to really get to grips with the ASHA journals.

Boberg Okay, the thing I wanted to ask you about was your comment that you had looked at several of the undergraduates, and had found them wanting. I am wondering whether or not you will find this with the Canadian undergraduates because of their type of program compared to the American programs?

Ling So far we haven't had any experience with the Canadian program; we have just had Americans.

Boberg For instance, I think that our graduates and the Western Ontario graduates will have had at least 30 hours in the normal area, about 60 hours in speech pathology and audiology and 500 odd hours in clinical practicum. In addition, they have courses like linguistics and

statistics built in the program.

Kroll At Western we have never really broken our courses down into hours. We have gone by the Canadian system. We have a limited number of full courses.

Ling But are you in audiology and speech pathology?

Kroll Yes, we are in audiology and speech pathology equally.

Boberg Well, I think that we have to discover whether or not people are going to hire master's people or bachelor's. I know of several places in Wisconsin, because of economic pressures, the bachelor's are going out getting jobs whereas the master's are sitting with no jobs. Whether or not the Alberta legislature will finance a graduate program or unless we can somehow indicate that, well, I just don't know at this point whether or not. . . .

Zink I think there is another important consideration here and that is to once again differentiate between speech pathology and audiology when we are talking about the graduate level. I think there is definitely a place for the technician that Dan [Ling] was talking about. Also, I think in Alberta, that our Alberta graduate certainly would not be prepared to be an audiologist in any sense of the word. However, we definitely do need people in audiology in Alberta who can do aural rehabilitation work and good advanced clinical audiology. And I think that if we do not have these people that we are going to have a terrible void and it sort of alarms me too, to think that possibly technicians could come into Canada and someone hire a technician in lieu of an audiologist to do his audiology for him. I think this is something that could happen if it is not controlled in some way.

Ling It is already happening here in Quebec. The Minister of Health, Claude Castonguay, has really specified the type of thing that he wants in health services, and this is the same sort of thing for the medical practitioner as for the audiologist or speech pathologist. He wants some sort of pyramidal structure where there are a host of less qualified people working at lower levels and, at higher levels, fewer and fewer. I can't argue with this type of thing in theory. You see, I think what is fundamental to all of these questions is something else that we really have not discussed. That is the question, "What do audiologists do and what do speech pathologists do, and what should

they do?"

Kroll Is there any reason to believe that our people in Canada do anything different from those individuals in other countries where perhaps the profession is more established?

Ling I think it is not just a question of geographic location, but of the development of health services in general. Our situation is probably very comparable to many parts of the United States, but we are not at all comparable to many places in Europe in terms of the population. Loads of hospitals in Canada have single-handed therapists.

Yovetich Three different types of training programs are represented today: the graduate only, the undergraduate only, and an undergraduate program to be combined with a prospective graduate program. Is this healthy or should there be standardization of training programs in Canada?

Boberg I don't think so. I think this is one of the things that makes it exciting. A student has a choice of going several routes, and also different philosophies will emerge from different programs.

Ling I think the thing that is really quite important is for each of us to know much more about what we are actually doing, and as Fred [Skalny] pointed out, not just what we are doing, but how well we are doing any particular thing.

Skalny To reduce discrepancy between programs, I think we would have to eventually initiate some kind of examination board on the national level, which I really don't particularly go for.

Kroll Are we limiting the mobility of our graduates by having different training programs? Is the Alberta graduate going to be able to work in Quebec? Is a British Columbia graduate going to be able to work in Ontario?

Yovetich The thing that bothers me a little bit is that we do, by having our different programs, end up being very provincial. We get the "my program is better than your program" type of thing and (to answer your question) we force the people to stay in a particular area. The Ontario graduate, whether he be from Toronto or from Western, ends up staying in Ontario by virtue of his training.

Boberg Well, I hope we can avoid that sort of thing. Maybe it means that we, as a group, have to get together periodically and talk about what we

are doing.

Kroll We are all sitting here as professionals in training programs. Why not try to look at this from the point of view of the consumer? There is no reason to believe that a person with a speech and/or hearing problem in British Columbia is any different from a person with a similar problem in Quebec, and for that reason, let's assume that for one reason or other, those people trained in Quebec programs will tend to remain in Quebec and those trained in other provinces will remain in other areas by and large, because this is where their "holes" may be. Don't you think that there is an argument for some kind of standardization of training across the country? You are dealing with the same type of problem, coast to coast.

Skalny Yes, I firmly believe that it is our responsibility, with the co-operation of the practicing clinician in Canada, to discuss what a minimal level of competence is and to try to have all training institutes attain this minimal level of competence in their final product. However, all instructors have academic freedom in terms of teaching their courses. Therefore, if we define even minimal competence, we are talking about a total number of hours completed in broad categories of course work. We are not saying anything, really, about the amount of type or depth of content in these categories. I think that we can arbitrarily define a minimal level of competence, but we have no safeguards that this person is really at that level of minimal competence.

Zink Are you suggesting, perhaps, some type of national licensing?

Skalny I hope we don't really get into national licensing and board exams and things of that nature.

Ling There are whole problems facing Canada about this national licensing thing. In Canada, the provincial interests overrule the federal interests, and one of the reasons is that funds in support of our training schools largely come from the provincial coffer. Here in Quebec there is the additional problem that people who are trained in the French language are obviously much more tied to Quebec. This can be a big problem, because quite a lot of things like lower salary scales can be imposed in Quebec simply because the government is aware that mobility for higher paid jobs is not going to occur.

Kroll If standards were to be set for the country, should these be set by the

profession or by the university faculties?

Ling I think this is one and the same thing. By and large, even though we are on the university faculties, we are also very deeply involved in professional work, either directly or indirectly. I think that it would be not a case of either/or. We would in fact end up representing both areas, wouldn't we?

Kroll Are you saying that the Canadian profession should make that decision, and the professors would contribute to that decision because they are part of the Canadian profession?

Ling Yes, that is what I am trying to say.

Yovetich I would say a more pressing problem that may face us is, "Should standards be set by the profession or by various departments of health?"

Ling That, I think, is much more the point. This is what I was driving at when I said that provincial interests override federal interests.

Kroll And I think this is one battle that we may have to fight.

Boberg Would you suggest then that from that point of view it would be better to have a strong national organization, a strong national profession that might be a more powerful lobby than to fight all these battles on the individual provincial level?

Zink Or would it be better to have a strong provincial organization; in other words, each province administer its own?

Skalny But if we have a strong responsibility and if we can define a common level upon which we can operate, I think in numbers alone, there is extreme power in a strong national organization. We could make recommendations on how we should operate and what we should consider an adequate training program; what we should consider an adequate wage; and determine the type of function that a speech clinician or an audiologist must perform in terms of the community.

I think we must assess the problem as to what our community needs and how best can we get to them. I don't think anyone sitting up in an administrative capacity, at the provincial level or the federal level, should be able to tell us how we should serve the needs of that community. I think we are the qualified, trained people that should be interested in how best we can serve the needs of the community.

Ling But you know, although that is your personal feeling, it isn't always

borne out in practice and this is true in medicine, and I think it is very much true in our profession, that there are a whole whack of underprivileged people that never get any access at all to medical services, or our services in speech and hearing. One has only to go on an open line program to realize, from the type of question asked, these people don't even get basic medical care. You know, this is one of the problems and so even when we say we know what we should be doing, maybe we actually have a very biased picture, and maybe there is more to it than simply our deciding.

Skalny Yes, but we also have a community commitment. Probably most of us here today have not been as involved in the community as we could be because of other roles or responsibilities we have to perform within our university or college positions.

Yovetich Your point is well taken, Fred, but in one sense, I think it is a little bit of a "cop out" because there are resource personnel available. We have people in public health; we have people in family medical practice; we have people in children's aid societies, at least we do in Ontario. Here we have the individuals already out in the community, knowing what is happening and seeing what types of problems there are. We don't have to do this survey work ourselves if we get the data from them in some systematic and organized fashion. We can have the information with very little time expended.

Skalny But we don't have that type of an operation at this moment set up. You would say we should take more initiative in this, so I say, "Fine, we would love to get more involved," but that means something else is not being done. Our budgets are extremely tight, so there is an economic problem. And there is a political problem involved here. There is a traditional administrative hierarchy that we are bound to follow if we are going to try to alter what we think our professional role should be, and how we believe we can best serve the population out there.

Ling What we haven't touched on really at all is the need and how adequately our programs are actually serving the requirements of Canadian society. Are we producing enough? Are we producing too many? Not just the right sort of people, but people.

Boberg I would be interested if they try to calculate in about two years how

many will the current training programs be producing. McGill produces how many . . . 15 every year?

Ling Yes, about 15 a year.

Boberg And Western will produce. . . .?

Kroll About 12. The first graduates will not be graduating until 1973.

Boberg And Toronto produces how many . . . 10 or 15?

Ling I would say about 15.

Boberg The University of Montreal?

Skalny The University of Montreal is something around 30; 25 or 30. They are getting larger each year. British Columbia is very small; perhaps 6 or 8 that are in the clinical . . . that are going on for advanced PhD training.

Boberg Is there a need for more programs or for our present programs to produce more people?

Skalny Definitely more programs. I am sure.

Ling To produce more people from our program would be virtually impossible without limiting the amount of clinical experience that these people are exposed to. We are limiting ourselves to this number, 15 or 16 a year at the outside, simply because we don't have training facilities or practicum facilities outside this. We could take more in academic training, but we couldn't take them for practicum.

But then there is another point. What is the number of people coming in from other than Canadian programs. The flow across the border north can be very large; the flow to the south of the border is relatively small, because it is very difficult for Canadians to get work permits down there. So we know we are not relying entirely on our Canadian product by any means, nor are we likely to be.

Boberg And it is quite possible that the flow from the south of the border will increase.

Ling In Quebec there is now a language requirement that every person in audiology or speech pathology must be able to speak French, and so this is really going to limit the influx both from the States and other parts of Canada into this province.

Boberg Does that mean that they have to speak quite fluently or just have a working knowledge.

Ling I think somewhere between the two. It is quite difficult to define what is a working knowledge. An audiologist ought to be able to administer

live voice testing in a reasonably good standard of pronunciation and to talk to the patient about all his various problems, welcome them into the clinic and that sort of thing. On the other hand, it is virtually impossible for a speech pathologist to work with somebody other than in his mother language unless he has an extremely high level of second language ability.

Boberg Do you mean that the student from Montreal must be equally fluent in English to work in Quebec?

Ling Oh no, it is a one-way street. French is the official working language of this province, and it doesn't matter whether you speak English, but it does matter very much that you speak French.

Zink Reference was made earlier to the possibility that "health" may dictate our standards. Is this more likely in Canada because all of our training programs are located in schools of medicine?

Kroll I don't know whether there is a cause/effect between that and the possibility of the dictates of the departments of health. I think that the possibility exists, because we have rather strong organizations of colleges of physicians and rather weak or not as well organized associations in speech pathology and audiology.

Ling We enjoy working in the School of Medicine at McGill. I think primarily because we have a lot of advantages as professors in a school of medicine, and we have much more money, both personally and departmentally, as a result of this liason. We also find that our program is the more efficient in this relationship, because McGill has a number of teaching hospitals, and a lot of the policy in these hospitals is determined by the University and the medical professors in the University. And, I think that we are able to exert considerable influence through professors of medicine, otolaryngology in particular, to give our students the right sort of opportunities to learn and our graduates the right sort of opportunities to practice.

Kroll Are you fairly autonomous within the faculty of medicine?

Ling We are practically autonomous, yes. We are under Otolaryngology but that's really a nominal thing, because everybody's got to be under somebody's wing.

Zink Dan [Ling], I was wondering if being in the School of Medicine hampers your auditory rehabilitation program inasmuch as you tend

to follow a medical model more than an educational or rehabilitative model?

Ling That doesn't hamper us in the least. We have a tremendous range of practice facilities in the schools for the deaf and also in the clinics, and our students in aural rehabilitation are, I think, at an advantage, because we work in a school of medicine. I really think so.

Kroll At Western Ontario, we have been getting good co-operation from the higher echelons of administrative set up in the Faculty of Medicine, and I really don't see how different the situation might be, for example, if one found their department in the Faculty of Science where the Dean of Science might be a physicist, rather than a speech pathologist. I think the situations are analogous.

Boberg In Alberta, we are not in the Faculty of Medicine, but in the School of Rehabilitation Medicine, which is somewhat different, but we get excellent support. I can't say that it does hamper us at all. Currently, we are receiving co-operation with our efforts to effect curriculum revisions. We hope to present the proposal for a master's degree next fall, and then we hope that we might be ready to go by 1973. But that is being optimistic.

Kroll As we mentioned before, we, too, are working towards a master's degree. We are limited to clinical facilities. We are in a poor situation in that when we farm out our students to the various clinical facilities in London and the Southwestern Ontario area, in many respects they are out of our control. They are in clinical facilities that were established before the formation of our own program.

One of the things that we fought for is our own clinical facility, and we have been given strong indications that we will be allotted about 3,600 square feet. I don't know whether this will happen or not, but we have been asked to design our own clinical facility which will be an integral part of our academic program, under our supervision. When this is completed in 1973, we will be able to not only improve the academic and clinical program, but possibly train more students.

Ling We are constantly evaluating and re-evaluating our program and the students have been concerned in this, not only our present students, but our past students. There is one area we are considering at the present time that we, as a profession should consider, and this is our

relationship with teachers of the deaf. Right in the beginning, in 1963, when the course was first molded, the whole idea was that we were a human communication disorder group and (even though we are located in a Faculty of Medicine) that this group included such people as teachers of the deaf, educators. We would be able to work in the training of this type of person, and we feel that we have a great deal in common with them. We could see, for example, that virtually all of our first year program is as germane to teaching the deaf as it is to teaching audiologists and speech pathologists. We would like to give the profession of educators of the deaf the opportunity to upgrade themselves by using courses that we have developed, and maybe to set up possibilities for some of our students to take further training and go into the education of the deaf.

As a whole, our profession has been very neglectful of deaf children, and it is a horrifying thought to me that there are now about 3,500 children in schools for the deaf across Canada with a pupil/teacher ratio of about 5:1. This is, as you can see, a tremendous number of teachers of the deaf: 700 roughly in classrooms and of that 700, only a few have a master's degree. A few more have a bachelor's degree and many don't have any university training or qualification to work with deaf kids at all. Now I think that these kids are our concern, and I think we have got to look very carefully at the standards achieved. We can be concerned in two ways. Either we can do quite a lot of this work by ourselves and train our students to work in the education of the deaf, or we can give opportunity to the teachers to qualify or start training people to go into that field. I think there is a future for development of this type, not a large one, but a significant one, in our McGill program. One only has to look around. Audiology and education of the deaf are regarded as far too separate. The educator of the deaf needs to know much more about audiology and speech pathology, and the audiologist and speech pathologist a lot more about education. I think here is a real area where we can advance. I would really like to see high quality teachers of the deaf being interested in our group. This, I think, is a terribly important development that we must work for, and this is one of the major developments we anticipate.