Faculty development in Canadian medical schools: a 10-year update

Education

Éducation

Peter J. McLeod, MD; Yvonne Steinert, PhD; Louise Nasmith, MD; Larry Conochie, MD

Dr. McLeod is Professor in the Department of Medicine, Pharmacology and Therapeutics, Dr. Steinert is Associate Dean of Faculty Development, Dr. Nasmith is Chair of the Department of Family Medicine, and Dr. Conochie is Assistant Professor in the Department of Surgery, McGill University, Montreal, Que.

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Abstract

Objective: To compare the current status of faculty development practices in Canadian medical schools with the status of such practices in 1986.

Design: Mail survey.

Setting: All 16 Canadian medical schools.

Participants: Faculty development coordinators at the medical schools.

Outcome measures: Existence of faculty development committees, funding for faculty development activities, types of activities and recognition of faculty participation in such activities.

Results: Completed responses were received from all schools. They indicated a significant, positive evolution in faculty development since the previous survey, conducted in 1986. Most schools have established a faculty development committee and provide funds for such activities as workshops, sabbatical leaves and conference attendance. Although traditional development practices are prevalent, there is now widespread emphasis on computer technology, information retrieval, management skills and research. Experienced faculty and other experts are more widely used for consultation on teaching. Very little has been done to evaluate the impact of faculty development.

Conclusion: Faculty development in Canadian medical schools has undergone a major, positive transition during the last 10 years.

Résumé

Objectif : Comparer les pratiques actuelles de perfectionnement des enseignants des facultés de médecine du Canada à celles de 1986.

Conception : Sondage postal.

Contexte : Les 16 facultés de médecine du Canada.

Participants : Coordonnateurs du perfectionnement des enseignants des facultés de médecine.

Mesures des résultats : Existence de comités de perfectionnement des enseignants, financement des activités de perfectionnement des enseignants, types d'activités et reconnaissance de la participation des enseignants à ces activités.

Résultats : On a reçu des réponses de toutes les facultés. Les réponses ont indiqué une évolution importante et positive du perfectionnement des enseignants depuis le sondage précédent de 1986. La plupart des facultés ont créé un comité de perfectionnement des enseignants et financent des activités comme des ateliers, des congés sabbatiques et la participation à des conférences. Même si les méthodes classiques de perfectionnement prévalent, on insiste maintenant en général sur la technologie informatique, l'extraction de l'information, les techniques de gestion et la recherche. On consulte en général des enseignants chevronnés et d'autres experts au sujet de l'enseignement. Il ne s'est pas fait grand chose pour évaluer l'impact du perfectionnement des enseignants.

Conclusion : Le perfectionnement des enseignants des facultés de médecine du Canada a connu une évolution importante et positive au cours des 10 dernières années.

Faculty development involves activities "designed to improve an individual's knowledge and skills in areas considered essential to the performance of a faculty member in a department or residency program."[1] A 1986 survey of Canadian medical schools conducted by 1 of us (P.J.M.) showed a surprisingly positive commitment to faculty development, especially in regard to teaching.[2] However, respondents to that survey were concerned that programs were underfunded and that faculty participation was poor. The report on the survey recommended that medical schools establish a committee on faculty development, fund practices instituted by the committee and recognize attendance at programs and workshops in considering promotion and tenure. Since 1986 there have been profound changes in health care and in many aspects of medical education.[3,4] In the health care sector, financial constraints, downsizing and restructuring have resulted in fewer beds in teaching hospitals, inpatient programs being shifted to ambulatory and community settings, and development of multi-institutional and multidisciplinary care programs. In medical education, most Canadian schools have revised their curricula. Some have moved to problem-based teaching, others to emphasis on self-directed learning and small-group teaching. In all schools, the instructional approaches have increased the emphasis on problem-solving, interpersonal skills and attitudes and have put less stress on information acquisition as the primary aim. Instructional and communication technology has also changed dramatically. To accommodate these transitions, educational institutions have had to undergo fundamental changes in roles and expectations; some authors have suggested that the transition has been so dramatic that a new faculty development model is needed.[5]

As a result of the discussions of the Special Resource Committee on Faculty Development of the Association of Canadian Medical Colleges, we decided to conduct a follow-up survey of faculty development practices at Canadian medical schools, 10 years after the previous survey, to see whether program managers had addressed the faculty's needs in accommodating the new realities of academic life. Specifically, we wanted to compare and contrast practices prevalent in 1986 with those prevalent in 1996 through the use of a survey questionnaire almost identical to that used in 1986.

Methods

In the late autumn of 1995 we sent a letter to the deans of the 16 Canadian medical schools informing them of the purpose and nature of our study. We asked them to identify the person at their school who was the "champion" of faculty development and who was most responsible for this function. The deans who did not respond to the first letter were sent a second letter and, if necessary, were telephoned to obtain the names of the responsible people. We then sent each of the people identified a questionnaire modelled after that used by Centra,[6] who studied faculty development practices in US colleges and universities. As in the 1986 survey, we grouped development practices into 5 broad categories: institution-wide practices, such as sabbaticals and annual teaching awards; workshops, seminars and similar presentations; activities that involve media, technology and course development; analysis and assessment procedures; and miscellaneous practices. A sixth category, not used in the 1986 survey, contained 6 questions about how faculty development at each university has evolved during the past 10 years. In all, there were 50 questions in 6 categories, each followed by a section for comments. We asked respondents to indicate the extent to which each of the practices was used at his or her medical school, to rate the effectiveness of each practice on a 4-point scale and to comment on the advantages and disadvantages of each of the practices. We estimated that it would take 10 to 15 minutes to complete the questionnaire. We directed a second letter and a follow-up telephone call to the people responsible for faculty development who did not respond to the initial mailing.

Results

All 16 deans of medicine responded to our request for the name of the person responsible for faculty development at their medical school, and all 16 of these people returned completed questionnaires. Of the respondents, 7 were assistant, associate or vice deans of education or academic affairs, 3 were directors of faculty development, 3 were assistant or associate deans of faculty development and 3 were directors of an office of medical education.

All of the medical schools reported the existence of a faculty development program, whereas in 1986 only 12 schools had such a program.

Institution-wide practices

Table 1 indicates the prevalence of institution-wide faculty development practices reported in 1996 and in 1986. Sabbatical leaves and funding for conferences, both resource-intensive practices, are still widely used in this era of cost-containment. Regular awards for excellence in teaching were more widely used in 1996 than in 1986, as were grants to improve instruction or courses. Perhaps the most impressive change has been the increase in the number of schools that have a faculty development committee.

Media, technology and course development

Courses aimed at developing teaching skills were reported in all 16 schools (Table 1). Given the recent advances in in-

Table 1: Faculty development practices in the 16 Canadian medical schools, 1986 and 1996

Practice	Year; no. of schools reporting practice 1986	1996
Institution-wide practices		
Sabbatical leaves at half of salary or more	12	14
Funding to attend professional conferences	11	12
Periodic review of teaching performance	10	11
Visiting scholarships	10	14
Circulation of pertinent newsletters and articles	9	9
Annual awards for excellence in teaching	9	14
Grants for projects to improve instruction or courses	7	11
Travel grants to update knowledge	6	7
Temporary reductions in teaching load to work on new courses, course revisions or research	6	8
Committee on faculty development	4	11
Leaves of absence for educational or development purposes	3	4
Lighter teaching load for new faculty members	2	4
Specific times set aside for professional development	1	3
Use of media, technology and courses		
Development of teaching skills (e.g., lecturing, leading discussions and teaching small groups)	10	16
Use of learning resources		
Computers	9	12
Audiovisual aids such as television programs and videos	7	14
Testing or evaluation of student performance	7	12
Professional library on teaching methods and learning psychology	6	10
Development of courses by consulting on objectives and design	5	10
Simulated procedures that enable faculty members to practise teaching skills	5	9
Types of analysis or assessment procedures		
Systematic rating of instruction by students	12	15
Informal assessment by colleagues	7	6
Consultation with experienced faculty members on teaching or course improvement	6	13
Analysis of in-class videotapes to improve instruction	5	5
Classroom visits and assessment by an instructional resource person upon request	5	5
Informal assessment by colleagues	3	5
Self-assessment of strengths and weaknesses	3	4
Systematic evaluation of teaching or course by an administrator	2	6
Close collaboration of senior faculty members with new teachers	0	2

formation technology and electronic media, it is not surprising that faculty development coordinators reported widespread faculty instruction in computer technology and audiovisual aids as learning resources. Most other practices listed in this category have also increased in prevalence since 1986.

Analysis and assessment practices

Systematic rating of instruction by students were a more widespread practice in 1996 than in 1986 (Table 1). There has been an encouraging increase in the evaluation of and feedback on teaching from sources other than students. In 13 of the 16 schools, experienced faculty members provide consultation on teaching or course improvement, and, in 6 schools, systematic teaching or course evaluation is conducted by an administrator. At 2 schools, respondents indicated that senior faculty work with new teachers to improve teaching, whereas in 1986 none of the schools reported this practice.

Miscellaneous practices

The respondents indicated that much more attention is now paid to improvement of faculty members' research and scholarship skills. More workshops on management skills are now given. The respondents also indicated that there is now more use of grants to develop courses on teaching.

Ten-year evolution

As shown in Table 2, the responses in this category indicated major overall changes in faculty development in the last 10 years. Half-day workshops have become the predominant vehicle for development, and needs assessment has been implemented in 11 schools to establish what faculty members want out of workshops. Of particular note is the establishment of a faculty development committee in 9 schools. As a result, courses and scholarships are now more common. Attendance at these courses and programs is considered in promotion and tenure decisions at 8 schools. Peer and expert evaluation of teaching was reported at 10 schools. It is surprising that the faculty development coordinators at half of the schools reported that there is an adequate budget for faculty development at their school. However, research on the outcomes of faculty development efforts was reported at only 4 schools.

There is a discrepancy between the number of newly established faculty development committees, shown in Table 2, and the number of committees in place in 1986 and 1996, shown in Table 1. Four schools had committees in 1986; if 9 new ones were established since 1986, there should now be 13 committees, not 11, as indicated in Table 1. This discrepancy may have arisen because 2

schools had eliminated their committees or because some respondents misunderstood part of the questionnaire.

Effectiveness of practices

Five respondents did not rate the effectiveness of various practices, giving such reasons as "measurement methods are insensitive" and "outcomes have not been assessed." In the 11 responses to this section of the questionnaire, the following 5 practices were rated as most effective: (1) programs that provide instruction on lecturing and small-group instruction, (2) instruction in use of computers for teaching and information management, (3) sabbatical leaves with salary support, (4) regular awards for teaching, and (5) faculty development provided at minimum or no cost.

Coordinators' comments

Open-ended comments by the respondents indicated that, at several universities, faculty development programs are available but are not necessarily under the auspices of the medical-school committee. Even within medical schools, different small development groups, some at a departmental level, address issues such as grant writing, clinical teaching for residents and other department-specific initiatives. One coordinator stated that "faculty development was done on an *ad hoc* basis prior to our curriculum reform but now is conducted on a more systematic basis."

Survey respondents indicated that at several Ontario universities the Education of Future Physicians of Ontario project, a collaborative venture designed to make medical education more responsive to the province's needs, had significantly stimulated faculty development activities based at the medical school. As well, at some schools, workshops for academics are part of the CAN MEDS 2000 project, a major development project designed for the education of specialists. Some coordinators indicated that local faculty development had been stimulated by clinicians who had received master's degrees in education.

Table 2: Respondents' agreement with statements concerning the evolution of faculty development during the last 10 years

Statement	No. (and %) of respondents who agreed *n = 16*
Half-day workshops or seminars are a common faculty development format at the school	14 (88)
To guide faculty development activities, needs assessment procedures have been established	11 (69)
A faculty development committee, previously nonexistent, has been established	9 (63)
Courses or fellowships in faculty development have become more common	10 (63)
There has been improvement in the evaluation of teachers by peers and other experts	10 (63)
An adequate budget has been allocated to faculty development	8 (50)
Faculty attendance at programs and workshops is recognized in promotion and tenure decisions	8 (50)
Research has been conducted to assess the outcomes of faculty development	4 (25)

Discussion

The results of this survey show that there has been a positive evolution in faculty development in Canadian medical schools during the last 10 years. All schools reported the existence of faculty development programs, and 9 of the 16 schools reported the establishment of faculty development committees during the last decade. Coincident with the establishment of these committees, some (but not all) schools are apparently committing funds for development activities, despite the current climate of cost-containment. At half of the schools the coordinators reported that an adequate budget had been allocated to faculty development. At 14 of the 16 schools, sabbatical leaves with salary support are still offered. As well, funds are available for course development, development of new approaches to teaching and travel to professional conferences.

Not surprisingly, traditional faculty development practices remain popular in Canadian schools. Half-day workshops focusing on teaching skills for lecturing, small-group teaching, student evaluation and use of learning resources are still prevalent. Health sciences faculty members generally prefer workshops as a method of learning.[7] As the essential competency needs of faculty have changed during the last decade,[8] there has been a transition in the profile of faculty development practices. The galloping pace of information technology probably explains the increased emphasis on computer technology and information management. Improvement of management skills is now seen as a prominent need, and improvement of research and scholarship skills has gained popularity during the last 10 years.

For faculty members whose principal role is teaching, feedback for improvement of pedagogic skills has increased. Experienced and skilled faculty are now widely used as a resource for consultation on teaching and, at almost half of the schools, administrators provide systematic teaching and course evaluation. This "near-peer" feedback or mentoring has been shown to be a useful practice,[9] and our survey provides evidence that this idea has gained acceptance in some schools.

In addition to the usual limitations of questionnaire-based information, there are other limitations and potential sources of bias in our study. The respondents' titles and, probably, job descriptions differ somewhat, and their perceptions of the state of faculty development activities at their universities may be affected by their roles. As well, we have no iron-clad assurance that the data are accurate. The respondents may harbour biases that lead them to view their efforts in a positive light.

Although the survey did not address the causes of the changes in faculty development practices during the last 10 years, it is interesting to speculate about the forces for change. Almost all of the country's medical schools have recently undergone significant revisions in curriculum, with many moving to a problem-based format requiring large numbers of small-group tutors. Curriculum change creates uncertainty among faculty, which is a useful stimulus for faculty development.[10,11]

Changes in health care and education may play an even more strategic role in change. Faculty members are being forced to examine their career and personal goals. Many are having to make major career changes, which can be facilitated by some faculty development practices. The prevalence of workshops on research skills may be related to the fierce competition for research funding over the past several years.

What are the implications of our survey results for the future of faculty development? In our opinion, the prognosis is excellent. Our survey seems to show a sense of collegiality in the approach to faculty development as well as a commitment to funding by deans of medicine. However, programs must become broader to address the full range of faculty responsibilities in contemporary health science centres. Although teaching remains a central activity, we feel that more attention is required in the areas of personal development, values, attitudes, beliefs and communication skills. Research and scholarship, writing skills, career management and lifelong learning also require more attention.[7] The literature on faculty development contains new and interesting ideas on how to capitalize on this positive atmosphere.[12–14]

One area in which progress has been lacking is the evaluation of the impact of faculty development.[15] The assessment of success rarely goes beyond short questionnaires asking participants whether the program was useful and enjoyable.[16] The validity of the usual self-assessments conducted before and after interventions is affected by training influences,[17] making the results of questionable value. Quantitative research methods are now being used to supplement qualitative methods,[11–17] and retrospective self-assessments show promise,[17] but there is still a need to define precisely the expected, readily identifiable outcomes of faculty development activities and to design better methods to measure them.

Conclusions

Our survey indicates that faculty development in Canadian medical schools has made major strides during the last 10 years. To continue the momentum, we, as the people responsible for faculty development, must meet several challenges. We must explore new strategies and methods to help faculty, especially those newly appointed,[18] meet the challenges of the new realities in Canadian health care and medical education. Although teaching must remain a major focus, we must increase our efforts to address research skills, management practices, written communication skills and self-improvement. Above all, we must double our efforts to evaluate the effectiveness of our practices. If major benefits are not evident, we must re-evaluate what we are doing.

We thank the 16 people involved in faculty development in Canada's medical schools who took the time to complete our questionnaire.

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Reprint requests to: *Dr. Peter J. McLeod, Department of Medicine, Montreal General Hospital, 1650 Cedar Ave., Montreal QC H3G 1A4*