■ Original Research

Faculty development practices in Canadian medical schools

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Twelve Canadian medical schools that had an organized faculty development program were surveyed to evaluate the extent to which such programs were used and to estimate their effectiveness. Common practices included sabbaticals and programs designed to improve instructional skills. The main problems included underfunding, poor participation and inadequate instructor evaluation.

On a effectué un sondage auprès de 12 facultés canadiennes de médecine offrant un programme organisé de perfectionnement des enseignants pour évaluer dans quelle mesure ces programmes étaient employés et pour en estimer l'efficacité. Au nombre des pratiques répandues figurent les périodes sabbatiques et les programmes d'amélioration des compétences pédagogiques. Les principaux problèmes comprenaient le financement insuffisant, la faible participation et l'aspect inadéquat de l'évaluation de l'enseignant.

P ressures are mounting on university administrators to be more supportive of physicians in their teaching role.[1-4] Numerous schools have responded to these pressures by introducing faculty development programs designed to enhance dedication and involvement; they have tried to change attitudes and approaches not only to the role of instructor but also to the role of academic. In a recent survey of faculty development practices in Canadian universities Konrad[5] found that 60% of the universities had organized programs, two thirds of which had a designated coordinator. Konrad concluded that there is a pressing need for the improvement of instructional skills of university teachers and a less urgent need for the development of personal and organizational skills.

In medical schools faculty priorities usually relate to research and patient care. Dedication to the educational requirements of students, interns and residents usually receives little recognition or reward;[2,6,7] therefore faculty development practices aimed at improving instruction are probably poorly developed in Canadian medical schools.

I carried out a study to assess how many Canadian medical schools have an organized program or set of practices for faculty development and improvement of teaching skills and to evaluate the effectiveness of various practices. The term "faculty development" encompasses a wide range of activities used to assist faculty members in all aspects of their academic role.

Methods

A letter was sent to the deans of the 16 medical schools asking whether there was an organized program or set of activities for faculty development and, if so, what the name and address were of the person responsible for coordinating the activities.

The second part of the study consisted of a survey of the coordinators. Each was sent a questionnaire modelled after that used by Centra,[8] who studied faculty development practices in US colleges and universities. Centra had reviewed the literature and designed a questionnaire that grouped development practices into five 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. My survey included questions related to 43 development practices that were grouped into the same five categories. The coordinator was asked to

indicate the extent to which each practice was used and to rate its effectiveness on a four-point scale.

The final part of the questionnaire was open-ended and invited comments on the advantages and disadvantages of the faculty development practices and suggestions on what should be done to increase faculty interest.

Results

A response was received from all 16 deans, and 12 (75%) indicated that they had a faculty development program. Completed questionnaires were received from the 12 coordinators, who held various positions at the schools, including associate dean for education and coordinator for faculty development in medical education.

Institution-wide practices

Sabbaticals, funding to attend professional conferences, periodic review of teachers' performances and visiting scholarships were reported by more than 80% of the respondents, and newsletters and awards for excellence in teaching were reported by 75% (Table I). Only four schools (33%) reported the existence of a committee to overview and coordinate faculty development.

Workshops, seminars and programs

It is not surprising that the four commonest practices in this category were aimed directly at "teaching techniques": instructional methods, curriculum evaluation, assessment methods and educational trends (Table II). It is practical and popular to establish instructional programs that vary in length from several hours to a week, faculty attendance usually being voluntary.

Media, technology and course development

These practices usually require the help of specialists or specialized services and were used only moderately in the schools (Table III). The commonest practices in this category also related to enhancement of instructional techniques. Learning resources such as television, videos and educational literature were infrequently used.

Analysis and assessment procedures

Evaluation of instructional skills, with feedback, is a valuable practice; however, the only

Table I — Institution-wide development practices used in 12 Canadian medical schools that had an organized faculty development program

Practice	No. (and %) of schools
Sabbatical leaves with at least half salary	12 (100)
Funding to attend professional conferences	11 (92)
Periodic review of teaching performance	10 (83)
Visiting scholarships	10 (83)
Circulation of pertinent newsletters and articles	9 (75)
Annual awards for excellence in teaching	9 (75)
Grants for projects to improve instruction or courses	7 (58)
Travel grants to update knowledge	6 (50)
Temporary reductions in teaching load to work on new courses, course revisions or research	6 (50)
Committee on faculty development	4 (33)
Leaves of absence for educational or development purposes	3 (25)
Lighter teaching load for new faculty members	2 (17)
Specific times set aside for professional development	1 (8)

Table II — Topics of workshops, seminars and programs used as faculty development practices in the 12 schools

Topic	No. (and %) of schools
Methods or techniques of instruction	11 (92)
New approaches to curriculum development	11 (92)
Testing and evaluating student performance	10 (83)
General issues or trends in education	8 (66)
Goals of the institution and types of students enrolled	7 (58)
Improvement of research and scholarship skills	5 (42)
Improvement of interpersonal skills	3 (25)
Improvement of management of departmental operations	2 (17)
Improvement of academic advising and counselling skills	1 (8)

Table III — Uses of media, technology and courses as faculty development practices in the 12 schools

Practice	No. (and %) of schools
Developing teaching skills (e.g., lecturing, leading discussions and teaching small groups)	10 (83)
Learning resources	
Computers	9 (75)
Audiovisual aids, such as television and videos	7 (58)
Testing or evaluating student performance	7 (58)
Providing professional library on teaching methods, skills and learning psychology	6 (50)
Developing courses by consulting on objectives and design	5 (42)
Providing simulated procedures that enable faculty members to practise teaching skills	5 (42)

practice in all 12 schools was "rating of instruction by students". Student ratings are valuable, especially if they are combined with other evaluation methods and supplemented by a faculty-based advisory service to correct any deficiencies.[9] As shown in Table IV the other assessment methods were not widely used; for example, none of the

Table IV — Types of analysis or assessment procedures used as faculty development practices in the 12 schools

Practice	No. (and %) of schools
Systematic rating of instruction by students	12 (100)
Informal assessment by colleagues	7 (58)
Consultation with experienced faculty members on teaching or course improvement	6 (50)
Analysis of in-class videotapes to improve instruction	5 (42)
Classroom visit and assessment by an instructional resource person upon request	5 (42)
Formal assessment by colleagues	3 (25)
Self-assessment of strengths and weaknesses	3 (25)
Systematic teaching or course evaluation by an administrator for improvement purposes	2 (17)
Close work of senior faculty member with new teachers	0

Table V — Miscellaneous practices used for faculty development in the 12 schools

Practice	No. (and %) of schools
Visits to other institutions to review programs or projects	6 (50)
Enrolment in courses offered by colleagues	6 (50)
Grants for faculty members to develop new or different approaches to courses on teaching	5 (42)
Personal counselling on career goals and other personal development areas	5 (42)
Programs of faculty exchange with other institutions	3 (25)

Table VI — Ten most effective faculty development practices, according to the program coordinators in the 12 schools

Sabbaticals with at least half salary
Workshops, seminars and programs on
   Various methods or techniques of instruction
   Testing and evaluating student performance
   New or different approaches to developing curricula
Periodic review of the performance of all faculty members
Assistance to faculty in developing teaching skills (e.g., lecturing, leading discussions and teaching small groups)
Visits to other institutions to review programs or projects
Assistance to faculty in constructing tests or evaluating student performance
Visiting scholarships for short or long periods
Systematic evaluation of instruction by students

respondents reported that senior faculty members were contacted to assist new instructors or experienced instructors who wished to improve their teaching skills.

Miscellaneous practices

Although the practices listed in Table V were not widely used, visits to other institutions to review programs and projects, and enrolment courses offered by colleagues were used in half of the schools.

Effectiveness of practices

In analysing the coordinators' evaluations of effectiveness for the 43 development practices, we used a point system: two points were given to practices deemed most effective and minus two to those rated most ineffective. The overall rating for each practice was derived by totalling the scores from all 12 respondents. Table VI represents a rank listing of the 10 practices the coordinators thought were most effective. Workshops, seminars and programs were among the most highly rated and, not surprisingly, the most widely used practices. However, awards for excellence in teaching and circulation of newsletters, also widely used practices, were rated 29th and 34th respectively.

Coordinators' comments

Most coordinators commented on the success of faculty development and the problems associated with current programs. Although most of the schools had a variety of development practices, either in use or being developed, the coordinators thought they were greatly underused by faculty members. Participation was often limited to instructors who were already recognized as successful academicians.

Many coordinators noticed a significant interest among teachers in faculty development but no reflection of this interest in budget allocations.

Another frequently reported observation was that the degree of recognition for the use of faculty development practices varied greatly between departments within medical schools. No single department was singled out as being the most active in faculty development.

Finally, although there was increasing emphasis on the assessment of instructional skills, it was rare for teachers to receive feedback after the assessment.

Discussion

The results of this survey indicate a surprisingly positive commitment to faculty development,

especially in the teaching role, at 12 of Canada's 16 medical schools. The remaining four schools did not report an organized program but likely had some hospital- or department-based practices. Some of the practices in many schools were in developmental stages, requiring financial and other support for development.

Traditional practices, including sabbaticals, funding to attend conferences, and workshops designed to enhance instructor effectiveness, were the most widely used and were generally perceived to be the most useful and effective. If these results accurately reflect the teaching patterns at Canadian medical schools, innovative methods such as computer-assisted learning, television, interactive videos and self-directed learning courses have apparently not been aggressively adopted. In addition, minimal emphasis was placed on scholarship programs, research, patient care and administration.

Two concerns were strongly emphasized by most respondents: first, only a relatively small number of the teachers took advantage of instructional courses, a concern expressed by administrators in other faculties;[10,11] second, instructor evaluation was minimal and was primarily done by students. Although useful, such evaluations have drawbacks, including the difficulty in substantiating their validity,[9] and should be combined with evaluations by the teachers, their peers and other experts, followed by feedback.

Conclusions

On the basis of the survey results, along with my opinions and those of the coordinators, I recommend the following to stimulate faculty development and to enhance dedication to and involvement in the educational function of Canadian medical schools:

- Medical schools should establish a committee on faculty development, with a defined mandate and representation from all major departments.
- The committee's mandate should emphasize programs and workshops that will enhance instructional skills.

- Administrators should ensure that there is adequate funding for committee-instituted faculty development practices.
- Attendance at programs and workshops should be recognized by means of promotion and tenure consideration.
- Instructional assessment should be expanded to include evaluations by the teachers, their peers and other experts, with feedback.

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An educated mind

General culture of mind is the best aid to professional and scientific study, and educated men can do what illiterate men cannot.

— *John Henry, Cardinal Newman (1801–1890)*