Library faculty role in problem-based learning: facilitating small groups*

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Since 1986, the library faculty of the McGoogan Library of Medicine at the University of Nebraska Medical Center (UNMC) has participated in small group activities during the week-long orientation for first-year medical students. This involvement paved the way for library faculty members to act as facilitators for small groups of medical students within the new problem-based learning (PBL) curriculum introduced in 1992 by the College of Medicine. The UNMC curriculum consists of traditional PBL groups as well as Integrated Clinical Experience (ICE) small groups. The ICE groups provide opportunities for discussion of the social and behavioral issues that arise in medicine, with the majority of the sessions designed to give students interviewing practice with simulated patients. The ICE small groups meet once a week with either one or two facilitators. Several library faculty members act as facilitators for ICE groups. As a result of this involvement, librarian contacts with College of Medicine faculty have grown in number and depth, there has been a corresponding increase in related activities with the firstand second-year medical students. Participation in ICE groups has caused some difficulties with respect to library work schedules, but it has been immensely rewarding and enriching in terms of professional growth. This paper describes the UNMC curriculum, the evolution and extent of the librarians' involvement, and the future involvement, ramifications, and challenges envisioned for McGoogan faculty and their medical library colleagues.

BACKGROUND

Each year since 1986, as a new class of medical students enters the University of Nebraska College of Medicine, the McGoogan Library faculty has worked closely with the college to orient the students to the

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lifelong learning environment. This formal orientation is called Introduction to Medicine, or Intro to Med [1]. Students are placed in small groups of ten to twelve students, with three facilitators: a clinician, a basic scientist, and a librarian. A case is presented to each group, and the students are plunged into the problem-based learning (PBL) environment, which requires that they identify learning issues and find information sources.

This three-day orientation gives medical students an introduction to the concepts and tools of lifelong learning, the process of working in groups, and the routine of discussing issues with peers and faculty. There have been various permutations of Intro to Med since 1986, but library faculty involvement and objectives have been constant. The library's objectives have been to familiarize the students, in an expeditious manner, with the reference sources, basic textbooks, and vital databases they will need during medical school. Although this may appear to be a traditional role, Intro to Med has in fact led to a wonderful opportunity and an expanding role for the library faculty.

In 1992, the College of Medicine introduced a PBL curriculum. In preparation, training sessions on facilitating in the PBL environment were offered to interested faculty. Facilitators then were recruited for both traditional PBL groups and Integrated Clinical Experience (ICE) small groups, for the first- and second-year students. Library faculty participation in the PBL training, and involvement with activities such as Intro to Med resulted in invitations to facilitate for the ICE groups.

INTEGRATED CLINICAL EXPERIENCE GROUPS

The ICE groups consist of eight to ten students and meet once a week per semester for approximately two hours per session [2]. The basic objectives of ICE are to offer practice in patient interviewing techniques, to provide a forum for discussion of issues that some students may perceive as controversial, and to enhance each student's group interaction skills. The ICE curriculum combines teaching and patient interaction within the context of efforts to humanize medical practice. The typical ICE session involves student interviews of a simulated patient or group discussions of an issue. Sessions on patient interviewing techniques may span two ICE sessions.

Interviewing techniques cover basics such as knocking before entering an examination room, introductions, relationship building, data gathering, and responding to concerns and inquiries. The sessions also cover emotion-handling skills, such as empathizing, legitimizing, and supporting. As the students progress, the ICE cases begin to address more com-

plicated issues such as initiating patient behavior change and contracting adherence to treatment. The experience students obtain in patient interviewing sessions has proven invaluable. Physician preceptors supervising the first students who participated in ICE groups were pleased with the high level of knowledge and enhanced skills that those students brought to patient clinics.

Most of the medical students in the ICE groups are from the midwest and have had minimal encounters with diverse cultures. The ICE small groups provide a forum for considering situations that may be encountered in a clinical setting and that some may find sensitive or controversial. Topics may include how to discuss the ethical issues surrounding adolescent patient confidentiality and the law, counseling persons with sexually transmitted diseases, obtaining a meaningful sexual history from patients with alternative lifestyles, and discussing reproductive rights and responsibilities.

Discussions with peers give students the opportunity to analyze their reactions to controversial issues. The use of simulated patients provides the opportunity to practice questioning techniques that can elicit information of a highly personal nature. The students also practice maintaining neutrality and a nonjudgmental attitude when dealing with patients whose beliefs may differ from their own. During these practice interviews, students learn that the group offers support and constructive criticism. As the year progresses, students recognize their individual limitations and work to improve interviewing and interpersonal skills. This forum allows students who initially may be reticent and shy to participate equally with other group members by the end of the year.

FACILITATING SMALL GROUPS

The facilitator's role

Facilitators for the ICE groups include physicians, psychologists, social workers, basic scientists, education specialists, and librarians. Facilitator responsibilities include guiding the group discussion to meet the objectives of the day, obtaining a balance of contributions from each student, keeping the discussion on target, and evaluating the students three to four times during the year. Facilitators watch and guide group dynamics, often providing a patient's perspective.

To aid in preparation for each group activity, facilitators have half-hour "ICE teas" before each session to review objectives, review past sessions, and discuss issues and changes in the ICE curriculum. Attendance at lectures and outside reading corresponding to the ICE group activities are optional for the facilitators. Therefore, the time commitment can vary. Each McGoogan faculty facilitator spends an

average of four hours per week on ICE preparation and small group meetings.

As with any new experience, library faculty members began the role of facilitating with some apprehension, but they have gained confidence in their small group skills through training and practice. Initially, all ICE facilitators shared a common concern about leading discussions on subject areas outside of their expertise. But facilitators quickly learned that effective group dynamics, self-directed learning, and competent interviewing skills are the desired outcomes of ICE, and that they did not need to provide definitive answers to specific subject-based questions.

Benefits

The benefits of the new ICE role for the library faculty are numerous, for both the individual faculty member and the library. Many other ICE facilitators are faculty members or instructors in the College of Medicine who always have had a direct teaching role. Now the library faculty is working side by side with the College of Medicine faculty to teach and evaluate the students. This role enables librarians to increase their awareness of the Medical Center's environment and the diversity of the classes.

The ICE teas have provided a forum where library faculty members can have consistent contact with key players in the curriculum and at the medical center. These gatherings have made it easier for the McGoogan staff to expand networking activities and develop professional relationships outside the confines of the library. The ICE tea routine is another avenue for communication, allowing those on each side to interact and share questions or concerns about the functions of the library. The increased exposure of librarians to medical faculty, and vice versa, can lead to deeper library involvement in the curriculum.

Library faculty members are actively involved in the students' development as knowledgeable health care professionals and have found facilitating to be very rewarding. Facilitators have a genuine concern about students' well-being and success in medical school. The problem-based curriculum demands that students spend considerable time in the library concentrating on learning issues, and their familiarity with the librarian facilitators encourages the students to inquire about library services, collections, and policies.

LIBRARIAN KNOWLEDGE AND SKILLS

There has been some debate whether "nonexperts" should be involved in facilitating small groups of medical students. In this segment of the ICE curriculum, the students are not expected to learn History and Physical (H&P) skills. The H&P segment is presented in a small group with a clinical preceptor. The

testing of H&P skills is carried out in the objective structured clinical examination format with clinical faculty instructors.

Many librarians are skilled in group dynamics and know how to interact with people. Many clinicians and basic scientists who are serving as facilitators have not had formal training in educational theory and group processes. Their academic degrees do not necessarily mean that they possess the skills needed to facilitate effectively. Barrows [3] believes that a subject expertise is a bonus in a tutor, but that the most important skill is getting students to work together to learn from each other, recognize learning issues, and locate learning resources.

In fact, the library faculty members do have the fundamental knowledge and skills needed by facilitators. Certainly, each brings to the role a basic knowledge of the environment and practice of medicine and the literature sources of medical information. In traditional library roles, issues of confidentiality and discretion—key elements of ICE work with the students—are addressed each day. As supervisors and managers, librarians encounter situations where staff evaluations and guidance need to be handled both tactfully and effectively.

Facilitating a group can be compared to a reference interview or a supervisory relationship. A reference librarian questions, re-states, and summarizes problems to ensure that the real issue is understood, and that the patron's goal is clear. Patient interviewing is much the same. Both scenarios demand open-ended questions and an objective attitude rather than closed questions and judgment. Similarly a supervisory role involves evaluation, guidance, observation of the staff as a team, and efforts to bring to the forefront the best traits of each team member. The ICE group situation calls for the same observation and intervention to facilitate group dynamics and individual development.

While the knowledge and skills already possessed by the library faculty can be applied to the facilitating role, facilitators learn from experience, just like students do. McGoogan faculty members have been facilitating for more than two-and-a-half years now, and they continue to increase their knowledge base. Facilitators possess a particularly keen interest in educational methodologies and the medical education environment. They participate in the facilitator training offered periodically at the Medical Center, read the relevant literature, and scan the Internet discussion groups relevant to PBL instruction.

PROFESSIONAL DEVELOPMENT OF LIBRARIANS

Initiative and self-motivation certainly contribute to the success of the individual facilitator. However, traditional professional development programs do not prepare librarians for facilitator or instructor roles. As the librarianship profession matures and encompasses educator roles, numerous changes must take place—and quickly—in information science curricula. A section in the Medical Library Association's Platform for Change [4] enumerates the areas in which health sciences librarians require expertise if they are to provide effective instruction. The areas are

- learning theory and cognitive psychology,
- curriculum and instructional development,
- instructional systems design,
- educational needs assessment and analysis,
- learning style appraisal,
- instructional methodologies, and
- evaluation of learning outcomes.

The McGoogan library facilitators have varied levels of experience in many of these areas. Most of these areas are approached in ICE activities. In the context of the ICE teas and the facilitators' evaluations of ICE, learning theory, curriculum and instructional development, learning styles, and instructional methodologies are discussed. While facilitators do not design the curriculum, cases, or instructional or evaluation methods, they do contribute knowledge, information, observations, and opinions on these issues. The role of McGoogan library faculty evolved from more traditional bibliographic instruction (BI) roles, and the best BI programs encompass the teaching of critical thinking and self-directed learning skills. All of this suggests that information science programs should include formal classes in instructional methodologies and theories, curriculum design, and evaluation methods, with the overall goal of expanding the traditional roles of librarians.

Many non-clinical subject areas are encountered in ICE, and in these instances in-depth knowledge and study would benefit the facilitators. For example, it would be helpful to have extensive knowledge of issues and decisions related to medical ethics, state and federal laws concerning public health, and topics faced by hospital internal review boards. The ICE sessions covering these issues have proved most interesting for facilitators, but frustrating for the students, because there are no concrete answers. One of the key lessons learned in these sessions is that pro-

fessional judgment is sometimes the physician's only recourse. Continuing education classes in these "gray areas" need to be offered to health information professionals to expose them to these relevant issues. Facilitators need to keep abreast of the latest trends, issues, and opinions in the health care field.

CONCLUSION

Education is a growing role for health sciences librarians. It is time for traditional library and information science curricula to change to reflect this trend. As information technology has evolved, library science schools slowly have incorporated instruction related to the changing technologies. It is equally important to address the interpersonal aspects of change, which consistently have been neglected. It is important to recognize that librarians always have been educators and that this education role will continue to grow.

At the University of Nebraska McGoogan Library of Medicine, the library faculty has taken a new direction on a route that leads beyond the library and incorporates curriculum-based client education. Information professionals cannot wait until traditional library schools change their curricula to meet the challenges of *Platform for Change*. Opportunities for direct involvement with health care education need to be identified, researched, and pursued.

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Received March 1995; accepted May 1995